

**REFLEXIVITY AND
PSYCHOLOGY: AN
UNRESOLVED DILEMMA**

By
Kevin Moore

A thesis submitted in
fulfillment of the requirements
of the degree of

DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

University of Canterbury
1990.

BF

38

M822

1990

ACKNOWLEDGEMENTS

To spend four years carrying out a piece of academic research inevitably requires the support and tolerance of many people. In my case the support I have received has been doubly appreciated. Not only have I gained practical help and encouragement but also such support has necessarily been a demonstration of faith in my ability. This has been especially so because of the obscure nature of my research topic.

In particular, I thank Ken Strongman who, as my supervisor, has always given me the encouragement to think openly and freely. In fact, without Ken's own openness to new ideas it is unlikely that I would have pursued my interests to the extent that I have. And I have also been very appreciative of the always timely conversations I have had with Brian Haig - it may only be by reading this work that Brian will realize just how helpful he has been to me.

Without doubt I must also thank my long-time friend John Eggleston. His strong motivation to return to university and his insistence on the value of acting on what you feel to be worthwhile were inspirational in my own return to academic study. I am also very thankful to my friend Karyn Taylor, who in the last year has not only been unflaggingly positive about my work but has also reminded me -and confirmed for me- the fact that even words and thoughts cannot completely proscribe life.

Finally, I am more than thankful to my family. To my Mother and Father - who must wonder when my 'education' will end- for always wanting me to do what I most wanted to do. To my brother Stephen and my sister Lyn for accepting me and my thoughts into their daily lives for the last three years and always making me feel at home. And to my nieces Kirsten and Erina and my nephew Gary for being the most real and natural people I know -and for putting up with me when I would forget myself and start speaking "that university talk!"

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS.....	iii
ABSTRACT.....	ix

CHAPTER ONE

1 REFLEXIVE ISSUES IN PSYCHOLOGY.....	1
1.1 INTRODUCTION.....	1
1.2 UNITY IN PSYCHOLOGY?	7
1.2.1 INTRODUCTION	7
1.2.2 SUMMARY: UNITY IN PSYCHOLOGY.....	10
1.3 VALUES IN PSYCHOLOGY.....	11
1.3.1 INTRODUCTION	11
1.3.2 SUMMARY: VALUES IN PSYCHOLOGY.....	14
1.4 'PURE' AND 'APPLIED' PSYCHOLOGY.....	15
1.4.1 INTRODUCTION	15
1.4.2 SUMMARY: 'PURE' AND 'APPLIED'	
PSYCHOLOGY	18
1.5 'CONSCIOUSNESS' IN THE HISTORY OF PSYCHOLOGY	19
1.5.1 INTRODUCTION	19
1.5.2 SUMMARY: 'CONSCIOUSNESS' IN THE	
HISTORY OF PSYCHOLOGY.....	23

1.6 'CONSCIOUSNESS' IN CONTEMPORARY PSYCHOLOGY.....	23
1.6.1 INTRODUCTION	23
1.6.2 THE 'SUBJECT' IN PSYCHOLOGY.....	30
1.6.3 SUMMARY: 'CONSCIOUSNESS' IN CONTEMPORARY PSYCHOLOGY.....	32
1.7 THEORIES OF PERCEPTION IN PSYCHOLOGY.....	33
1.7.1 INTRODUCTION	33
1.7.2 PERCEPTION AS REPRESENTATION	33
1.7.3 GIBSONIAN PERCEPTION.....	39
1.7.4 SUMMARY: THEORIES OF PERCEPTION.....	43
1.8 THEORIES OF KNOWLEDGE IN PSYCHOLOGY.....	43
1.8.1 INTRODUCTION	43
1.8.2 THE POSITIVIST APPROACH IN PSYCHOLOGY.....	44
1.8.3 THE REALIST VIEW OF SCIENCE.....	46
1.8.4 THE SOCIAL CONSTRUCTIONIST APPROACH.....	50
1.8.5 SUMMARY: THEORIES OF KNOWLEDGE IN PSYCHOLOGY	54

CHAPTER TWO

2 RADICAL BEHAVIOURISM AND ISSUES OF REFLEXIVITY.....	56
2.1 INTRODUCTION.....	56
2.2 AN OUTLINE OF RADICAL BEHAVIOURISM.....	59
2.2.1 MEANING IN RADICAL BEHAVIOURISM.....	60
2.2.2 KNOWLEDGE AND RADICAL BEHAVIOURISM.....	64
2.2.3 CAUSALITY IN RADICAL BEHAVIOURISM.....	68
2.2.4 EXPLANATION IN RADICAL BEHAVIOURISM.....	71
2.3 PRIVATE EVENTS AND RADICAL BEHAVIOURISM.....	75
2.4 PRIVATE EVENTS AND 'TACTS'.....	82

2.5 CONCLUSION: RADICAL BEHAVIOURISM AND ISSUES OF REFLEXIVITY.....	94
2.5.1 INTRODUCTION	94
2.5.2 RADICAL BEHAVIOURISM AND THE AGENT	94
2.5.3 RADICAL BEHAVIOURISM AND REFLEXIVE FEATURES OF PSYCHOLOGICAL EXPLANATIONS	96
2.5.4 RADICAL BEHAVIOURISM, REFLEXIVITY AND THE EVALUATION OF PSYCHOLOGICAL EXPLANATIONS.....	100

CHAPTER THREE

3 WITTGENSTEIN'S 'EARLY' PHILOSOPHY AND ISSUES OF REFLEXIVITY.....	105
3.1 INTRODUCTION	105
3.2 WITTGENSTEIN'S <i>TRACTATUS</i> AND REFLEXIVITY.....	108
3.2.1 THE <i>TRACTATUS</i> AND THE NATURE OF LANGUAGE	110
3.2.1.1 Language as Picturing	110
3.2.1.2 Thoughts, Propositions and Sense.....	112
3.2.1.3 Logic.....	116
3.2.2 SELF-REFERENTIAL SENTENCES AND PARADOX.....	119
3.2.3 SUMMARY STATEMENT ON WITTGENSTEIN AND SELF-REFERENTIAL PARADOXES.....	124
3.3 THE PARADOX OF THE <i>TRACTATUS</i>	125
3.3.1 INTRODUCTION	125
3.3.2 ELEMENTARY PROPOSITIONS AND TAUTOLOGIES	126
3.4 PSYCHOLOGY AND THE <i>TRACTATUS</i>	134
3.4.1 INTRODUCTION	134

3.4.2 THEORETICAL UNITY AND LIMITS.....	135
3.4.3 VALUES AND THE 'MYSTICAL'	137
3.4.4 APPLIED PSYCHOLOGY AND THE <i>A PRIORI</i>	138
3.4.5 CONSCIOUSNESS, PERCEPTION AND SOLIPSISM	142
3.4.6 CAUSALITY, EXPLANATION AND LIMITS.....	147
3.5 SUMMARY: PSYCHOLOGY AND THE <i>TRACTATUS</i>	150

CHAPTER FOUR

4 THE 'LATE' PHILOSOPHY OF WITTGENSTEIN	153
4.1 INTRODUCTION.....	153
4.2 'POSSIBILITY', 'MEANING' AND 'ORDINARY LANGUAGE'.....	162
4.2.1 'POSSIBILITY' AND 'MEANING'.....	162
4.2.1.1 Reconciling Two Forms of Meaning.....	165
4.2.2 ORDINARY LANGUAGE	170
4.3 'LANGUAGE-GAMES' AND 'FORMS OF LIFE'	176
4.4 IS WITTGENSTEIN'S 'LATE' PHILOSOPHY 'EXPLANATORY'?	182
4.5 WITTGENSTEIN'S PHENOMENALISM.....	188

CHAPTER FIVE

5 SUMMARY AND CONCLUSIONS.....	197
5.1 INTRODUCTION.....	197
5.2 REFLEXIVITY IN LANGUAGE.....	200
5.3 REFLEXIVITY IN PSYCHOLOGY.....	207
5.3.1 REFLEXIVITY AND THEORETICAL UNITY IN PSYCHOLOGY	207

5.3.1.1 Discussion.....	207
5.3.1.2 Conclusion: Reflexivity and Theoretical Unity in Psychology.....	214
5.3.2 REFLEXIVITY AND VALUES IN PSYCHOLOGY.....	216
5.3.2.1 Discussion.....	216
5.3.2.2 Conclusion: Reflexivity and Values in Psychology	221
5.3.3 REFLEXIVITY AND 'PURE' AND 'APPLIED' PSYCHOLOGY	223
5.3.3.1 Discussion.....	223
5.3.3.2 Conclusion: Reflexivity and 'Pure' and 'Applied' Psychology.....	229
5.3.4 REFLEXIVITY AND CONSCIOUSNESS IN PSYCHOLOGY	232
5.3.4.1 Discussion.....	232
(1) 'Person constructs Reality' or 'Reality constructs Person'?.....	233
(2) 'Contents' of Awareness versus the 'Intrinsic Character' of Awareness.....	236
(3) The Nature and Role of the Psychological 'Subject'.....	239
5.3.4.2 Conclusion: Reflexivity and Consciousness in Psychology	244
5.3.5 REFLEXIVITY AND PERCEPTION IN PSYCHOLOGY	246
5.3.5.1 Discussion.....	246
5.3.5.2 Conclusion: Reflexivity and Perception in Psychology	250
5.3.6 REFLEXIVITY AND KNOWLEDGE, CAUSALITY AND EXPLANATION IN PSYCHOLOGY.....	251
5.3.6.1 Knowledge.....	251

5.3.6.2 Causality and Explanation	254
5.3.6.3 Conclusion: Reflexivity and Knowledge, Causality and Explanation in Psychology	258
5.3.7 REFLEXIVITY AND RADICAL BEHAVIOURISM	259
5.3.7.1 Discussion	259
5.3.7.2 Conclusion: Reflexivity and Radical Behaviourism	266

CHAPTER SIX

6 GENERAL CONCLUSIONS: REFLEXIVITY AND PSYCHOLOGY	268
6.1 DISCUSSION	268
6.2 SUMMARY OF MAIN CONCLUSIONS	284
REFERENCES	285

ABSTRACT

The seemingly endless possibility of reflecting upon psychological theories and 'knowledge' has created an intractable difficulty in understanding what psychology is about and what it produces. This 'problem of reflexivity' was therefore adopted as the focus of this dissertation. The aim was to determine whether it is possible for psychology to be understood clearly without ignoring or denying the 'problem of reflexivity'. Selected dichotomies and debates representative of various subject areas and theoretical and philosophical 'levels' within psychology were outlined and examined. These included: the prospects for theoretical unity in psychology; the distinction between 'pure' and 'applied' psychology; difficulties with the concepts of 'consciousness' and 'perception'; and theories concerning the nature and status of knowledge in psychology. In each of these areas reflexive problems were found that originated in two incommensurable versions of the concept of 'meaning': meaning as *reference* and meaning as an activity or *use* over time. Radical behaviourism, despite its uniqueness, was found to be unable to resolve these difficulties, especially in its characterization of 'private events'. Ludwig Wittgenstein's investigations into the limits of sense were found to provide a way to reconcile the two versions of meaning and to thus resolve reflexive problems. It was concluded that reflexive problems must be approached *grammatically* if any sense is to be made of them. Therefore, psychological theories can be understood as *language-games* which both explore and provide 'training' in the grammatical possibilities of human action. Finally, it was claimed that reflexivity should be understood grammatically and *not* as a psychological (or *causal*) ability or process. Thus theorizing in psychology has an unavoidable grammatical aspect. In *this* aspect the study of psychology finds a clear home in the world of 'ordinary', meaningful human action.

CHAPTER ONE

1 REFLEXIVE ISSUES IN PSYCHOLOGY

1.1 INTRODUCTION

The most interesting thing about psychology is how peculiar an activity it can sometimes appear. Even the novice in psychology early in his or her career is likely to wonder if there may not be something ironic about the attempt to understand oneself. This wondering is not confined to the novice, however. To 'know thyself' has been recognized for millenia as one of the most subtle and difficult of human activities. Like apostates walking boldly and defiantly across 'holy ground' there may remain for the psychologist a small doubt as to whether, after all, there is good reason for the ground trodden being called 'holy'.

A great deal of the thrust of modern (20th century) intellectual activity may reinforce this doubt. Examples of this modern trend are numerous and cover many areas. Hofstadter's (1979) book *Göedel, Escher, Bach: An Eternal Golden Braid* is a collection of intellectual threads bearing the same recursive birthmark. From an Escher drawing of a picture in a gallery somehow containing the gallery, to infinite loops in computer programming; from the limitative theorems of Göedel in mathematics to Russell's Liar Paradox the unfortunate ability to apply meaningful

statements to themselves has haunted some of the greatest intellects of the century. And prior to the present century such recursion has had its philosophical counterparts in various idealist and solipsist philosophies.

But it is not because of discoveries in the highly abstract areas of mathematics, logic and metaphysics that psychologists have had to face the possibility of the reflexive nature of their pursuit acting as a highly subtle confounding variable. Rather, it is in the midst of observation, theory, application and assessment of application that the question of the influence of 'reflexivity' arises. The following quote from Margolis (1989) shows just how the reflexive features of psychology are linked to the more diffuse problems of reflexivity found in so many intellectual endeavours;

Psychology is a reflexive discipline, however cleverly it may camouflage its practice in surveys and experiments. The observers and observed are one. All the human sciences are infected with that benign disease. Hence, on a reasonable theory, even the physical and formal sciences owe their objective standing to a steady orderliness perceived within the flux of the other. It is that reflexivity, of course, that accounts for the otherwise extraordinary speculative leap that connects the fate of our theories of persons and selves to the fortunes of the largest philosophical puzzles. (p. 329).

Certainly the "infection" of reflexivity -or at least the *awareness* of reflexivity- seems to be spreading most rapidly in the human sciences. This spread has already reached the point at which some sociologists and anthropologists are attempting the unenviable intellectual task of examining and 'analysing' the phenomenon of reflexivity in its own right ((e.g.) Woolgar (1988) has edited a book devoted to examining the extremely complicated connections between knowledge and reflexivity). However, the problem of reflexivity has been around for a long time, as has already been suggested. And, indeed, the awareness of the problem has not been restricted to the 'human' sciences or to 'human' scientists. The growing obsession of the modern mind with the phenomenon of reflexivity is clearly manifested in the following quotes from the physicist Heisenberg (1958) -

perhaps the most famous advocate from the physical sciences of the need to be aware of reflexivity;

...for the first time in the course of history modern man on this earth now confronts himself alone. (p. 23).

...this new situation emerges most clearly in modern science itself where... we can no longer consider 'in themselves' those building-stones of matter which we originally held to be the last objective reality. This is so because they defy all forms of objective location in time and space. (p. 24).

Thus even in science the object of research is no longer nature itself, but man's investigation of nature. (p. 24).

The new mathematical formulae no longer describe nature itself but *our knowledge* of nature. We have had to forego the description of nature which for centuries was considered the obvious aim of all exact sciences. (p. 25).

The scientific method of analysing, explaining and classifying has become conscious of its limitations, which arise out of the fact that by its intervention science alters and refashions the object of investigation. In other words method and object can no longer be separated. *The scientific world-view has ceased to be a scientific view in the true sense of the word* . (p. 29).

For psychologists the problem of reflexivity can be put quite simply: *Is it possible to know what people are really like?* In particular, are people really collections of traits, drives, attributional dispositions, learned behaviours -or whatever form of psychological explanation is being favoured? It may be a commonplace in the philosophy of science to speak of the theory-laden nature of observations but is there anything left of an observation in psychology after the theory has been carefully dissected out? Even the pre-theoretical existence of the psychological subject or organism has been

challenged ((e.g.) Harré, 1984; Henriques, Hollway, Urwin, Venn, and Wolkertine, 1984).

And when psychological knowledge is applied controversy does not subside. The practical fruits of an approach can be judged as tasteless or poisonous. For example, Schwartz, Schuldenfrei, and Lacey (1978) argued that the success of operant psychology methods employed in factories is not because people necessarily behave according to operant principles but because the factory environment has been so arranged that that is how people will act. If they are correct (and it is difficult to see how such a claim could be disproved) then the psychologist *qua* technician could be in the god-like position of imposing a view of people onto society which in essence is arbitrary. Dixon (1983) termed this "the circular path of a single theory science" (p. 338).

This criticism, of course, is not limited to the behaviourist approach. If psychologists are not careful they could bequeath, as Howard (1985) said, "an impoverished view of humanity...[by] viewing humans from an unduly narrow perspective,..." (p.264. Brackets added).

Yet the alternative may not be much better. While the hegemony of one particular approach in psychology may be undermined by pointing out the reflexive nature of psychologizing, neither the option of theoretical pluralism (Dixon, 1983), nor that of a relativistic social constructionist view of psychological theorizing -and knowledge in general ((e.g.) Gergen, 1985) -are without similar problems.

Advocating theoretical plurality simply moves the problem of reflexivity one step further back. For how is it to be decided which criteria should be used to determine which psychological theory is appropriate in any particular situation? Psychology may become little more than a factory producing psychological theories which the 'powers that be' can peruse at their leisure selecting and promoting any theories that suit their needs. Or, in less conspiratorial language, psychology may fragment, theoretically, *ad infinitum* losing forever any prospect of communication and comparison between different theoretical schools.

In other words, the *political* strategy of adopting theoretical pluralism to avoid theoretical hegemony should not be misunderstood as an

epistemological strategy aimed at discovering or establishing 'warranted' knowledge.

Similarly, a social constructionist view of psychological theories is in the paradoxical situation of asserting the very type of theorizing that it claims cannot be asserted justifiably. If all knowledge is the product of social forces unrelated to any standards of rationality (for any such standards are similarly 'socially constructed') then all assertion becomes propaganda. At least that would be the feared endpoint of such a relativistic view. Even liberal, humanistic values would suffer from this criticism. Is it possible to find middle ground between the extremes of dogmatism and relativism -or does an entirely new ground need to be found?

The picture drawn above is in many ways an oversimplification. It serves only as an initial introduction to the main argument of this thesis.

Before outlining the structure that this argument will take, it is necessary to clarify three senses in which the phenomenon of reflexivity will be discussed.

(1) *Reflexivity as a property of psychology's subject matter.* That is, is it useful in doing psychology to conceive of people as reflexive? Associated with this conceptualization is the characterisation of people as active agents.

(2) *Reflexivity of psychological explanation.* That is, can psychological explanation give a philosophically coherent account of its own production? Or is it either self-refuting or confused?

(3) *Reflexivity in the production and the evaluation of psychological theories.* That is, is a psychological theory assessable only from within the assumptions of that particular theory? Can psychological theories be compared within psychology or must it be left to philosophy to sort out the theoretical wheat from the chaff? This relates to the issue of whether or not there are psychological facts independent of the theory in which they are housed.

In Chapter 1 the possible role of reflexivity in psychology, as just defined, will be described in greater detail. Topics such as the desirability of unity in a scientific discipline, the place of values in psychology, the existence of two competing "cultures" ("scientific" and "humanistic") in psychology (Kimble, 1984), and the problematic nature of the relationship of clinical psychology and psychotherapy to "pure" research will be discussed.

Also in Chapter 1 the role of the concept of reflexivity at the level of psychology's subject matter and theorizing will be discussed. The conceptual confusion surrounding theoretical constructs such as the 'self', the 'psychological subject' and 'consciousness' will be described, as will the debate surrounding the theory of perception initiated by J.J. Gibson (1966; 1979) and representational theories of perception.

The topics to be discussed in Chapter 1, Sections 1.2 to 1.7 by no means account for all the areas of psychology within which reflexive problems can be found. A complete investigation of psychology in this regard would not just be exhaustive, it would also be exhausting. Nevertheless, the areas that will be covered should at least provide evidence for both the breadth and depth of the prevalence of reflexive problems in psychology.

Chapter 1, Section 1.8 will involve a critical discussion of attempts to bring sense to the theoretical diversity and conceptual confusion in psychology - as these were outlined in Sections 1.2 to 1.7- at least at the philosophical level. The discussion will concentrate on presenting particular theories of knowledge that have been mentioned in relation to psychology.

Chapter 2 will be devoted to a discussion of radical behaviourism insofar as it can be seen as providing a coherent philosophical attempt to clarify the psychologist's response to the issue of reflexivity.

The central argument of Chapters 1 and 2 is that attempts made to date have not and will not provide a common intellectual foundation for psychology which would allow some degree of meaningful communication between psychologists of different persuasions. When division seems as inevitable and intransigent as it appears in psychology it is likely that any resolution will involve a dramatic reorientation towards some fundamental and previously unchallenged assumptions. It is not that the rules of the game need changing but a whole new game must be played.

In order to begin to explore such a possibility an interpretation of the philosophy of Ludwig Wittgenstein will be discussed in Chapters 3 and 4. This will involve reworking the concepts of 'meaning' and 'epistemology' in order to provide the intellectual space and flexibility needed to view the phenomenon of reflexivity in psychology less problematically.

Chapter 5 will present just such a non-problematic view of the status of reflexivity in psychology with reference to the issues discussed in Chapters 1 and 2.

Finally, Chapter 6 will summarise and conclude.

1.2 UNITY IN PSYCHOLOGY?

1.2.1 INTRODUCTION

Armstrong (1980) stated that one advantage of the scientific approach is its ability to produce a consensus amongst reasonable people. If this is correct then an observer could be forgiven for thinking that psychologists are a particularly unreasonable and argumentative group of people. For not only does psychology manifest 'theoretical diversity' but there is also debate about the necessity and desirability of a unified view in psychology.

Does theoretical disunity in psychology result from the continuing influence of the "specter of psychism" (Observer, 1982, p. 293), "animism", and "spiritistic philosophy" (Kantor, 1984a, p. 69,70)? Or does it justifiably arise because psychological phenomena are "sufficiently dynamic, interdependent, and multidimensional as to require multiple theoretical renderings and multiple modes of inquiry" (Dixon, 1983, p. 337)?

For Observer (1971; 1982) unity in science is seen as bringing about the efficient and effective orientation to things and events and is undermined by a disunity stemming from mentalistic approaches that reinforce the "mind-body dogma". Such mentalism with its invisible constructs ((e.g.) 'sensations', 'perceptions', 'ego', etc.) produces unnecessary disagreement about "the very nature of what is being studied, rather than how events are described and evaluated or the method of investigating them." (Observer, 1982, p. 292). According to Kantor (1984a) mentalistic notions are nothing more than hangovers from spiritistic explanations and are to be contrasted with the naturalistic approach of science.

However, Dixon (1983) believed theoretical diversity should be encouraged in "every aspect and at every stage of scientific and philosophical investigation." (p. 338). Dixon based this belief on the philosophical work of Feyerabend and Popper (termed "fully discredited, irrational and

antiscientific" by Kantor, 1984a, p. 70). Feyerabend in particular, according to Dixon (1983), sees intellectual (and personal) development as being enhanced by a freedom arising from a pluralistic approach where theories must be compared with theories as well as with data, facts or experience.

Dixon (1983) is not alone in advocating pluralism. Walsh and Peterson (1985) in a comparison of psychodynamic, humanistic and behaviouristic paradigms stated that these three approaches are based on the three philosophical schools of idealism, interactionism and empiricism, respectively. Since it is not possible, according to them, to reject any of these world-views out of hand then the psychological theories based on them should not be rejected at present. Also, premature attempts at synthesising these theories should not be made as in the past this has "consistently led to unsatisfying technical eclecticism and conceptual confusion" (Walsh and Peterson, 1985, p. 152).

Further support for pluralism can be found in the field of 'scientific morality' where Leary (1983) advocated a plurality of values. What should be noted is that for both Leary (1983) and Dixon (1983) pluralism is not seen as a way of arriving at a final 'correct' psychology or morality. Rather, its benefit is in preventing the dominance of any one psychology or morality. As Dixon (1983) pointed out, this is based on an evolutionary epistemology and a critical realist ontology. Just as organic evolution is a non-teleological process of adaptation and change, so too, according to this view, is the accrual of knowledge about the world.

But it is just this metaphysics that Kantor (1984a; 1984b) objected to, ironically because of its absolutist and transcendental character. According to Kantor (1984b), "Acquaintance with a scientific type of psychology passes entirely by all the metaphysical aspects of traditional philosophy." (p. 168). And again, "modern psychology... demands the full participation of observers in scientific situations." (p. 168).

A clue exists here as to how the division between the 'pluralist' and the 'unificationist' arises (at least in the debate outlined). Put simply, the pluralist is concerned with emphasizing scientific theories as 'pictures' of how the world is. Thus, it is important that a science -particularly a 'young' science- should not be captivated by a single 'picture'. This can only be guarded against by having many competing 'pictures'. Conversely, Kantor seems more concerned with science as an activity rather than as a collection

of 'pictures' of the world. That is, the actual procedure carried out in time is ultimately more important to him than judging the validity of a particular 'picture'. Simply interacting with confrontable events produces the efficient and effective orientation toward them that is so essential to science. Presumably no 'picture' or theory can provide the information necessary for this orientation to take place.

Armstrong (1985) made a similar point in discussing the difference between experience and sensation. A sensation is traditionally viewed as an instantaneous awareness of something. Experience, however, according to Armstrong, involves "bestirring oneself" (p. 483) and "a movement through our circumstances" (p. 484). And Armstrong believed this to be the value of the experiment in that it involves directly interacting with the world: "Hence for the attainment of knowledge it [experience] implies not just watching our circumstances detachedly but engaging with them and seeing how we fare" (p. 485). It is commitment to experiencing in *this* sense that Kantor (1984b) seemed to consider the hallmark of a scientific psychology.

Now, it may be argued that Kantor is himself producing a 'picture' (or theory) of what scientific activity is. But, conversely, a pluralist's belief that a theory is a picture of reality can be seen as a pattern of behaviour (or, in Kantor's case 'interbehaviour') over time. Which is the more fundamental view? Do people actually 'picture' and therefore perhaps have mental images or representations, or do people actually behave and therefore believing in mental images is simply a pattern of behaviour? This intriguing question is closely linked to the issue of reflexivity. Does viewing thoughts on reflexivity themselves as behaviour over time free the psychologist from the reflexive trap? Or is it a 'meta-example' of being in a reflexive trap; that of limiting oneself to viewing one's thoughts on reflexivity as behaviour over time?

This dilemma is analogous to the difficulty Wittgenstein found in attempts to philosophically reconcile two views of meaning. That of meaning as "grasped in a flash" versus meaning as "use extended over time" (Finch, 1977, pp. 30-33). What eventuated in the philosophy of Wittgenstein from the attempt to reconcile these views is discussed in Chapter 4. Of interest, although not directly relevant to research in psychology, is that a similar duality is found in quantum physics. Specifically, in the wave/particle

duality of both light and matter. It is not the purpose of this discussion, however, to expand on or try to explain this similarity.

What are the future prospects for unity in psychology? Lichtenstein (1980) predicted and hoped that a "metasystemic" unification will eventually be achieved with a "contextualist" or "interactionist" approach (p. 456). This would bring together strands including interbehavioural psychology, ecological psychology and interactionist and contextualist approaches in both cognitive and behaviourist psychology. (For a recent outline of contextualist thinking see Jaeger and Rosnow (1988).)

At another level Giorgi (1985) saw unity in the very idea of scientists seeking unity. That is, the scientist "is being guided by a possible unity rather than an actual one" (p. 179). He therefore rejected Dixon's (1983) argument on the grounds that it does not even seek this unity. Similarly Lee (1985) criticized Dixon (1983) for advocating lack of agreement "about fundamental matters" (p. 290). She cannot envisage the possibility of psychology becoming a science if there is no consensual knowledge at all.

1.2.2 SUMMARY: UNITY IN PSYCHOLOGY

Armstrong (1980) suggested that what is good about science is that it produces consensus. Lee (1985), however, claimed that psychology needs consensus to be a science. It seems that if unity does not exist *in fact* in psychology at some level, then achieving unity in psychology is inevitably problematic.

In Chapter 5, following a discussion of the philosophy of Wittgenstein, an attempt will be made to show that the disunity in psychology results, paradoxically, from a view of meaning, epistemology and reality that psychologists have *in common*. This common view involves the possibility of two seemingly incommensurable approaches to, or outlooks on, the 'real' world.

1.3 VALUES IN PSYCHOLOGY

1.3.1 INTRODUCTION

Discussion of the place of values in psychology is not a recent phenomenon. In the first volume of the *Journal of Applied Psychology*, Roback (1917) published an article on the moral issues involved in applying psychology. And, as recent comments by Myers and Tweney (1983) and Morawski (1983) reveal, psychologists such as Münsterberg, Hall and McDougall debated the values and morality that psychology should possess earlier this century.

But the particular aspect of the role of values in psychology to be discussed here relates directly to the issue of reflexivity. For Howard (1985), characteristics of humans such as active agency, reflexivity and human values bring into psychology value questions not encountered in other sciences. While acknowledging that psychology's claim to be scientific must lie "in its adherence to the epistemic values of science", Howard (1985) insists that the characteristics of humans mentioned above present "a major problem in studying humans scientifically." (p. 259). According to Howard (1985), not only does reflexivity influence the psychologist's view of what she or he is studying but there is also the problem unique to psychology that the 'subject matter' can reflexively interact with the theory the psychologist is employing.

Of course, it could be argued that reflexivity is a problem for psychology in this way only because humans are *assumed* to be reflexive, active agents possessing values. But, ironically, such a criticism seems to imply that Howard, for example, has acted as a reflexive active agent possessing values. To be completely fair this may appear to be ironic only because of the necessity of using a language replete with reflexive, agentic, value-ridden terms.

Nevertheless, it seems that there are two options which seem incapable of being compared directly. Either psychologists should incorporate the reflexive nature of their subject matter and their own activity into their theorizing explicitly or they should suspend making such explicit assumptions and continue to observe and experiment, interacting directly with the subject matter.

An interesting point is made by Howard (1985) in the following passage;

Any discussion of human reflexivity begins with a consideration of language as the mechanism underlying the operation of the phenomenon and ends with the role of values in steering reflexive human action.... These steering values are often embedded in one's culture and influence not only individuals' everyday actions, but science as well. (p. 261).

Here is the connection envisaged between values and reflexive human action with language acting as the underlying (causal?) mechanism. Such an explanation of the operation of reflexivity is similar to the approach of Manicas and Secord (1983) towards explanation. This approach will be discussed later in this Chapter in Section 1.8.3 as alluded to in the 'Introduction'. Despite the partisan approach of Howard (1985) the connection between a view of language and an understanding of the problem of reflexivity is also considered crucial in the present discussion. A clear, or at least novel, view of this connection is vital before questions of value can be discussed. (See Chapters 3, 4 and 5).

A point less central to the argument being constructed in these opening considerations is also made in the passage quoted above from Howard (1985). If values steer reflexive human action, including scientific activity, then the door is wide open, of course, to questioning the legitimacy of advocating the scientific world-view because of its supposed 'superiority' over other world-views. John (1984) picked up on the possibility of this questioning occurring in society at large, and in fact claims it has already begun. He suggested, therefore, that it may not necessarily be wise for psychology to justify its existence as a social institution by claiming a scientific status.

An issue closely related to the place of values in psychology has been discerned by Kimble (1984). He presented the results of an empirical study that he claims suggests the presence of two distinct cultures within psychology. Kimble (1984, p. 833) named these cultures the "scientific" (valuing "scientific scholarly values"; (i.e.), observation, laboratory work, nomothetic laws, elementistic-atomistic analysis) and the "humanistic" (valuing "humanistic scholarly values"; (i.e.), intuition, field study, idiographic laws, holistic level of analysis).

A similar distinction on assumptions about psychology and scientific epistemology between behaviourist psychologists and non-behaviourist psychologists was found by Krasner and Houts (1984). Inevitably, considering that what is being debated is a reflexive phenomenon (that is, the effect of values on the type of science done), Messer (1985) noted that both Kimble's (1984) and Krasner and Houts' (1984) studies have unstated assumptions which have determined the method of scientific investigation used. (One can imagine a never-ending procession of such articles criticizing the previous article for having 'unstated assumptions'- perhaps still reflecting the belief that there exists some divine objective standard 'out there' coldly judging our best efforts as not objective enough.)

Despite this criticism the observations of Kimble (1984) and Krasner and Houts (1984) can be seen as restating, in a systematic way, the division amongst psychologists stemming from the unresolved issue of reflexivity at all levels including subject matter, methodology and philosophical outlook.

As for the future, it is hoped by Krasner (1978) that behaviourists and humanists will merge into some form of 'ecological' or 'environmental' approach to psychology based on their common values of desiring a "better world" and an emphasis on individualism (p. 803). Interestingly, it has already been noted in Section 1.2 that there is the hope that a 'contextualist' or 'interactionist' approach may unite psychology in a theoretical sense.

Similarly, Aanstoos (1985) agreed that psychology remains in conflict over its scientific and humanistic concerns. However, he believed this conflict can be resolved in what he terms "psychology as a human science" (p. 1417). To quote Aanstoos (1985);

Descriptive, phenomenological, qualitative procedures are more successful than experimental, statistical, hypothetico-deductive ones at disclosing the unique meaningfulness of human behaviour. Yet the former methods need be no less rigorous, systematic, or empirical than the latter. (p. 1417).

However, it seems unlikely that such a proclamation would make many converts in the behaviourist camp, either methodological or radical. The "unique meaningfulness of human behaviour" may seem vital to Aanstoos

but such meaningfulness may be easily dispensed with by the behaviourist in terms of stimulus-controlled sequences of behaviour formed by contingencies of reinforcement or fields of interbehaviour, without recourse to phenomenological, qualitative procedures. For example, it was Kantor's (1976; cited in Wolf, 1984) aim that "all psychological behavior from the simplest reflexes to the most complicated acts of thinking and reasoning could be described and interpreted in *completely naturalistic terms* [Emphasis added], analogously to that of the other sciences " (p. 451).

1.3.2 SUMMARY: VALUES IN PSYCHOLOGY

It seems then, that the place of values in psychology depends in part upon the understanding a researcher has of the role of reflexivity in theorizing. The question of values is just one aspect of the treatment of morality. As concisely put by Woolfolk and Richardson (1984), "Within a technological society the real, objective external reality of the world is constituted exclusively by empirically derived 'facts'. Morality comes to be viewed as subjective and relative..." (p. 780).

This subjectivising and relativising of morality as a concept gives rise to the question that Haan (1982; 1983) posed; "Can research on morality be 'scientific'?". Her own answer is that morality can only be perceived as a consensual activity and, indeed, she sees "most social-psychological knowledge" (Haan, 1982, p. 1098) in the same light.

Again, the argument of this thesis, to be outlined in Chapters 1 to 4, implies that the subjectivising and relativising of values has an important 'cause' and 'effect' in psychology. The 'cause' is to be found in a particular, shared, view of epistemology, meaning and reality. The 'effect' is that it suggests the possibility of two equally valid positions on values; either minimize or eradicate subjective values, or admit that values are inevitable and so always make attempts to explicate them. Which option is chosen depends in part upon one's understanding of the role of reflexivity in research. As Kimble (1984) stated;

What is still at stake is basic, and interestingly the residual sticking points are identical to those that have existed for millenia -a concern for a subject matter for its own sake

versus "man as the measure of all things."
(p. 839)

1.4 'PURE' AND 'APPLIED' PSYCHOLOGY

1.4.1 INTRODUCTION

The issue of values becomes most poignant when the activity of psychologists enters the lives of non-psychologists. The difficulties that arise at this interface were discussed by Reese and Fremouw (1984). They asked whether the normal ethics of science (those ethics actually in use) conform to the normative ethics of society (those ethics prescribed and generally agreed upon in society). If a conflict exists here, how is it to be resolved? However, despite the importance of such questions the issue to be examined here is more internal to psychology. How is the conceptualization of the relationship between theory and application formed and influenced by issues of reflexivity? This will be discussed particularly with regard to clinical psychology and psychotherapy.

Middleton and Edwards (1985) believed that the traditional distinction between 'pure' and 'applied' research needs to be circumvented. This, they claimed, can be done by conceptualizing psychology as both "theory" and "need" driven and, as a consequence, emphasizing understanding "how people function in naturally occurring circumstances..." (p. 149). That is, useful theory is not produced in the laboratory and then taken into the 'real world' fully formed and ready to be applied. Rather, theory should develop amidst "reality-determined issues and phenomena" to produce "a more natural relationship between... 'theory-driven' and 'need-driven' research.." (p. 146).

Whether correct or not such a call reveals a loss of faith in a world composed of facts which can be treated in isolation. Instead the distinction between fact and theory blurs to the extent that the 'ecological validity' of theories must be sought. The phenomenon studied in the laboratory is not the same as the natural phenomenon. While not stated explicitly by Middleton and Edwards (1985) it appears that one implicit reason for believing there is a difference between phenomena in the laboratory and phenomena in the natural situation is likely to be an assumed reflexive

capacity in humans. That is, a capacity to 'reflect' on situations in unpredictable ways.

Within clinical psychology (at least in Great Britain) a trend exists in which clinical work is seen as research in its own right rather than merely the application of methods and principles developed in 'pure' research. Shapiro (1985) stated this directly by claiming that there should be no difference between clinical work and research. The clinician should "try to make explicit the role of scientific method in every aspect of practical work, even in the most intimate and moment-to-moment interactions with patients." (Shapiro, 1985, p. 2). And Watts (1984) wanted to see clinical psychologists carrying out 'applicable' research, that is, research related directly to some issue of immediate clinical concern. He criticized the 'applied' research being carried out in Britain as being aimed at theoretical or methodological illumination.

Levy (1984) noted the growing pluralistic nature of clinical psychology in the United States which now deals with issues such as racism, delinquency, and the prevention and management of general health problems. Because of this trend Levy (1984) wanted to rename clinical psychology "human services psychology" (p. 492). This again suggests that 'applied' psychology is a field of research in its own right and does not simply involve the application of 'pure' research.

To summarise; Middleton and Edwards (1985) suggested that 'pure' research should be developed in natural situations. Some clinical psychologists reflect this view (although no causal connection is being claimed) in their desire to be seen as scientific researchers in their own right (Shapiro, 1985; Watts, 1984) developing a "human services psychology" (Levy, 1984).

A shift is occurring here which is important to recognize. Scientific psychology is no longer being perceived as a provider of methods and techniques, which the practitioner can choose to use or not use at his or her discretion. Rather, it is the 'scientific approach' or orientation to the world (in this case to clients) which is advocated in itself. It is worth repeating the following quote from Shapiro (1985); scientific method should be made explicit "even in the most intimate and moment-to-moment interactions with patients." (p. 2).

But in this area as in other areas of psychology (and perhaps more so) the divisions noted in previous sections are present. The trend within clinical psychology, as described above, has its antithesis in some psychotherapeutic approaches. The nature of an interaction between a client and a therapist in psychotherapy is far more controversial and far harder to define and prescribe than it is for Shapiro (1985). This indefiniteness is taken to the extent where the success of a therapist such as Milton Erickson, for example, can seem forever inexplicable. Feldman (1985) suggested that Erickson's successful use of a wide variety of methods is explicable in terms of a "multisystem model of eclectic therapy." (p. 154). However, without being glib it seems that what this means is that Erickson treated all his clients individually and simply had a 'knack' for doing the right thing at the right time.

It is interesting to compare this account of Erickson with Kantor's (1984a; 1984b) and Observer's (1982) accounts of the scientist in action. According to Kantor the scientist should relinquish metaphysical speculation and simply get on interacting with events so that the most efficient and effective orientation to events can be brought about. Similarly, for many psychotherapists, conceptualizing what is happening between themselves and their clients either while they are interacting or after, seems secondary to actually having the effective interaction.

What Rogers and Stevens (1967) termed "congruence" emphasizes the directness necessary in a client-therapist encounter;

By this [congruence] we mean that the feelings the therapist is experiencing are available to him, available to his awareness, and he is able to live these feelings, be them, and able to communicate them if appropriate... One of the things which offends us about radio and T.V. commercials is that it is often perfectly evident from the tone of voice that the announcer is "putting on," playing a role, saying something he doesn't feel. (p. 53. Brackets added).

'Congruence' is not a prescriptive method. That is, no criterion can be explicated as to what a therapist should say or how a therapist should act towards a client. It would seem paradoxical if congruence were prescriptive,

much as the instruction "Be spontaneous!" would seem paradoxical. That is, trying to be spontaneous is likely to stifle rather than enhance spontaneity. Similarly, if a therapist 'pictures' to himself or herself how to be congruent and then tries to apply that 'picture' in a therapeutic session, the chances are the therapist will not be practising congruence. This, of course, contrasts with the prescriptive advocacy of a 'scientific method' by Shapiro (1985).

1.4.2 SUMMARY: 'PURE' AND 'APPLIED' PSYCHOLOGY

The traditional view of 'pure' research providing a prevalidated technology for 'applied' workers to use places the question of values at the point of application. Value judgments needed to be made only in deciding on the applied objectives. This is stated by Wilson and O'Leary (1980; cited in Woolfolk and Richardson, 1984) quite clearly;

Selecting effective techniques with which to change behaviour is an empirical question in which the therapist is presumably an expert; choosing therapeutic objectives is a matter of value judgment...(p. 782).

But with the blurring of the distinction between 'pure' and 'applied' research, as highlighted by Middleton and Edwards (1985), once again two distinctly different possibilities arise. Either the methods of 'pure' research can be used more directly in the natural situation (for example, in the clinician-client situation) while still retaining the belief in the value-free status of these methods (or in their positive value); or, value questions can be seen as permeating all aspects of what was previously the two separate areas of 'pure' and 'applied' research. In the latter case the practitioner -for example, in the 'Rogerian' client-therapist situation- must abandon all prescriptive methodologies. In their place stand 'congruence' and "unconditional positive regard" (Rogers and Stevens, 1967, p. 54).

Of course, the alternatives described in this section are the two extremes. They have been emphasized because they are consistently derived from the two options that arise when the distinction between 'pure' and 'applied' research is blurred. In turn, it is suggested here, this blurring has resulted from a more reflexive view of theorizing. That is, the kind of theory used depends on the observations made which depend, to an extent, on the

theory used. Because of this, so it is assumed, 'pure' research can no longer play the role of the provider of theory to be used in 'applied' research.

Resolving the question of where values enter into applied research in psychology rests, once again, on the understanding one has of reflexivity in psychology.

1.5 'CONSCIOUSNESS' IN THE HISTORY OF PSYCHOLOGY

1.5.1 INTRODUCTION

The revival within psychology of interest in concepts such as 'consciousness', 'self', and 'psychological subject' is generally explained in terms of the decline of behaviourism. 'Consciousness' in particular is seen by some as a much neglected concept, if not a battered and abused child, in psychology. Mandler (1975) spoke of the "harm that consciousness suffered" (p. 229) during the ascendancy of behaviourism, and Jaynes (1976) of the "very real hypocrisy abroad" in that no behaviourist "really believed he was not conscious" (p. 15). And Natsoulas (1983) noted the lack of clear thinking about consciousness in contemporary psychology, directly attributing this state of affairs to the half-century delay in the "development and refinement of the conceptual apparatus" (p. 4) necessary to deal with consciousness.

However, if today's psychologist is not to commit the 'fundamental attribution error' by blaming 'narrow-minded' behaviourists for preventing the discussion of consciousness and the mind, then an explanation of the revival of interest in consciousness, as well as the denial of the importance of conceptions of consciousness during this century, must be found. Despite the fact that it can be stated in a psychology journal (admittedly by a philosopher) that, "[a]lmost any sane psychological theory will account for behaviour by reference to internal mental structure" (Morton, 1980, p. 29), it would be too parochial for the "thoroughly modern mentalist" (Fodor, 1980, p. 63), to write off the era of behaviourism as a case of temporary insanity.

Buss (1978) described the history of psychology in terms of a series of revolutions and counter-revolutions based on a "transformation of the subject-object relationship." (p. 59). Buss (1978) derived this view from the

transformative method of the German philosopher Feuerbach. Feuerbach's insight initially concerned religion and was the realization "that it is humanity which is the subject, and God the object, and, in this way, humanity can recover its primacy in the natural order" (p. 59). This transformation placed humanity in an active rather than a passive role.

Within psychology Buss (1978) saw transformations occurring between the two options of: (a) Person constructs Reality; and, (b) Reality constructs Person. The historical changes from structuralism to behaviourism and behaviourism to cognitive psychology, and the psychoanalytic and humanistic 'revolutions' are all interpreted by Buss (1978) as transformations between these two perspectives. According to Buss (1978) the end to such non-progressive transformations is the dialectical paradigm which "emphasizes the reciprocal, interactive relationship between the person and reality" (p. 62).

As has been discussed in previous sections the call for some type of 'interactionist' approach within psychology does have support ((e.g.) Krasner, 1978; Lichtenstein, 1980). However, what is particularly relevant in Buss' (1978) analysis is the following statement;

Such a characterization of revolutionary paradigms within psychology is unique to the human or social sciences since they are reflexive studies. The objects of study in the social sciences (people) are also subjects. (p. 59).

Once again reflexivity is the issue. If the objects of study in psychology are also subjects it is no wonder that violent paradigmatic oscillations can occur. But the question must be asked: Is it in fact possible to study a subject *qua* subject? Would such a study result in objectifying the subject (or 'de-subjectivising' the subject) and thus eliminate subjectivity from the subject? Is it possible to have a psychological theory which has a construct, called the 'subject', which captures the 'subject nature' of being a subject?

Natsoulas (1978a) in a discussion entitled "Residual Subjectivity" did not think so. He states; "A thoroughly objective science cannot include concepts whose rules of application require having the respective experiences" (p. 275). That is, that one determinant of behaviour involves 'having' a particular experience. This point is very closely connected to a

debate in the philosophy of mind literature concerning the existence or non-existence of 'qualia' (Churchland, 1985; Dennett, 1979; Jackson, 1982; Nagel, 1974). 'Qualia' are, "certain features of the bodily sensations especially, but also of certain perceptual experiences, which no amount of purely physical information includes" (Jackson, 1982, p. 127).

For Nagel (1974) it is these phenomenological features of experience that comprise the irreducible subjective character of experience. And Nagel (1974) linked this to the concept of consciousness: "the fact that an organism has conscious experience at all means, basically, that there is something it is like to be that organism" (p. 436).

The following passage from Dennett (1979) helps to clarify the link Nagel (1974) made between conscious experience and being a particular organism - that is, a subject;

We are all, I take it, unshakably sure that we are each in a special position to report, or to know, or to witness or experience a set of something-or-others we may call, as neutrally as possible, elements of our own conscious experience. In short, we all believe in the doctrine of privileged access.... There is a temptation at this point to analyze this privileged access to which experience one is having in terms of one's privileged authority about the existence or presence or occurrence in the experience of such entities as sensations, mental images, sense impressions, qualia, etc. (p. 93).

Dennett (1979) did not wish to succumb to such a temptation. Rather, he wished to defend the view that "our privileged access extends to no images, sensations, impressions, raw feels, or phenomenal properties" (p. 94).

Now, Buss (1978) said that the objects of study in psychology are also subjects. It seems that both Nagel and Dennett would disagree with this statement but for different reasons. Nagel (1974) stated that; "My realism about the subjective domain in all its forms implies a belief in the existence of facts ['realities'] beyond the reach of human concepts" (p. 441. Brackets added). So, for Nagel the subjective is a fact but it cannot be conceptualized. Therefore, it could not be studied directly by psychology.

Dennett (1979) however, would most likely claim that the objects of study in psychology are not 'also subjects' because the traditional, intuitive view of what makes a subject a subject is simply incorrect. The subject has no private access to various qualities such as images, sensations or sense impressions. An objective account, according to this view, would leave nothing out, including an explanation of everything involved in being a subject.

This distinction between the positions of Dennett and Nagel seems a more fundamental difference between the two paradigmatic approaches within psychology than does Buss' (1978) explanation of transformations of the person/reality polarity. Buss' transformations explain well the distinction between cognitive psychology ('Person constructs Reality') and what will be termed here, following Skinner (1945, p. 292), *methodological* behaviourism ('Reality constructs Person'). However, at the philosophical extremes of radical behaviourism and phenomenological psychology the traditionally defined and intuitively grasped concepts of 'Person' and 'Reality' no longer remain, at least recognizably, in the picture. Nagel's (1974) phenomenological reality is essentially inexpressible and thus conflicts with common sense reality which, at the very least, can be pointed to if not described. Similarly, for Dennett (1979) there is no traditional subject ('Person') living in a qualitative world of its own conscious experiences.

A simplified picture may help here. Cognitive psychology and methodological behaviourism can be seen as implicitly endorsing the intuitive and commonsensically understood concepts of 'Person' and 'Reality'. However, each approach either ignores one or the other of these concepts or encounters serious conceptual problems when attempting to accommodate the ignored concept. In this regard some criticisms of the way methodological behaviourism treats the mental will be mentioned in the discussion of radical behaviourism in Chapter 2. And in Section 1.7 below, concerning 'Gibsonian' and representational theories of perception, the conceptual problems involved in incorporating 'reality' into cognitive psychology will be discussed.

1.5.2 SUMMARY: 'CONSCIOUSNESS' IN THE HISTORY OF PSYCHOLOGY.

The above discussion provides a way of understanding the historical shifts within psychology in conceptual terms. If paradigmatic shifts are to be avoided in the future a conceptual resolution is required which quells the two fears psychologists have of, as Dennett (1979) termed them, "leaving something out [the subject] and multiplying entities beyond necessity [the mental realm]" (p. 93. Brackets added). The difficulty is in developing an approach to consciousness without presupposing a viewpoint that entails either leaving out the subject or multiplying mental entities *ad infinitum*.

Given this, one strategy is to examine why it appears unavoidable to adopt one of these viewpoints at the start. This examination is a further reason for confronting the basic philosophical concepts of meaning and knowledge. For philosophy, perhaps, these concepts need only be viewed as abstract topics for debate. However, for psychology they represent real problems and confusions whose clarification is of great practical import. This is so, firstly, because much time and effort is spent on the politics of promoting and financing particular approaches. Secondly, and more importantly, psychology plays a role in humanity's self-perception through its theoretical understanding of human consciousness. Understanding what it could possibly mean for humanity to have a 'self-perception' of course brings discussion back to the question; "What is consciousness?".

1.6 'CONSCIOUSNESS' IN CONTEMPORARY PSYCHOLOGY

1.6.1 INTRODUCTION

According to Natsoulas (1983) contemporary theorizing on consciousness is in the position of "virtually starting from scratch" (p. 4). In accordance with this belief Natsoulas (1983) presented a rigorous discussion of diverse problems of consciousness. These problems were those of conscious experience, intentionality, imagination, awareness, introspection, personal unity, the subject, 'consciousness' (as more or less), the normal waking state, conscious behaviour, and explicit consciousness.

It is neither the aim nor within the scope of the present discussion to detail all of these problems. Rather, it will now be argued that all of these 'problems of consciousness' arise from the difficulty of coherently incorporating meaning into psychological theories of consciousness. As Weimer (1976) persuasively argued:

In this sense there is only one problem in psychology, and everything in the field is a manifestation of it in a particular area. We have been grappling with this same problem since the dawn of reflective thought, grasping at it without ever reaching it at all... The problem of when stimuli are equivalent is the problem of stimulus recognition which is the problem of concept formation, ad infinitum, all of which together constitute the problems of meaning. Stimuli are equivalent, in the last analysis, only because they mean the same thing to the organism. (p. 14).

And;

The only way to solve the mind-body problem is to resolve what meaning is, and explicate how it is manifested in the natural order. (p. 15).

Hofstadter (1979) stated that it is the perceptions of "isomorphisms" between known structures that "create meanings in the minds of people" (p. 50). And again; "In my opinion, in fact, the key element in answering the question 'What is consciousness?' will be the unravelling [of] the nature of the 'isomorphism' which underlies meaning" (p. 82. Brackets added).

However, such statements manifest the difficulty of incorporating meaning rather than helping to overcome this difficulty. That is, perceiving isomorphisms is not the explanation but the problem restated. As will be discussed in Section 1.7 below, the field of perception in psychology is itself embedded in the conceptual difficulties surrounding consciousness and meaning. At what point meaning is said to enter the perceptual process can determine the type of theory of perception used. Does perception 'create' meaning- or as Ullman (1980) would prefer to say, "extract it, integrate it,

make it explicit and usable" (p. 381)- or is meaning perceived directly in the external world?

The problem of incorporating meaning into theories of consciousness is clearly illustrated using Natsoulas' (1981) 'problem of awareness' as an example, although any other problem mentioned by Natsoulas (1981) could have been used. According to Natsoulas (1981) an awareness has an 'intrinsic character' which makes, or at least defines, an awareness as an awareness. Distinct from this character are the 'particular contents' of an awareness. As he says, "[i]f awarenesses are occurrences, they must have further dimensions of characterization than merely their contents" (p. 146. Brackets added). Immediately this approach encounters a problem of reflexivity (see Reflexivity (2) in Section 1.1 above). How could the distinction between the intrinsic character and the contents of an awareness have become the contents of someone's awareness? How does the 'intrinsic character', existing as a content of an awareness, relate to the actual or 'real' intrinsic character of awarenesses? In general, how do contents relate to character or nature?

The above questions are similar to a question Wittgenstein (1974a) posed in the *Tractatus-Logico Philosophicus* : Is it logically possible for a picture to picture the way in which it is a picture? That is, of course, given that the picture is meant to relate to what it is a picture of in some systematic way. In similar vein, Rorty (1973) attacked the coherence of the view that knowledge 'mirrors' nature. These lines of thinking will be developed more fully in Chapter 3. However, with regards to theories of consciousness it seems that if contents of awareness are seen as referring to objects then at least one approach -that of Wittgenstein (1974a)- suggests that it may be logically impossible to know what it means for a 'content' to refer to its own 'intrinsic character'. That is, there may be no logical way to determine how such constructs should be used. Almost paradoxically, the use of these constructs may be in showing that they cannot be used.

These questions are very difficult to answer while maintaining the view that awarenesses are occurrences having contents. Only by saying that awarenesses, like perceptions, picture or represent the 'real' world does it seem possible to claim that the awareness of the intrinsic character of awarenesses reveals what the *real* intrinsic character of awarenesses is like. But such a strategy, of course, simply solves the difficulty by fiat. The

problem here is similar to the dilemma posed by the 'cognitive paradox' which will be discussed in Section 1.7 below.

Often these problems with the concept of 'awareness' are obscured by referring to the phenomenon of 'being aware of being aware'. But exactly the same difficulties arise at this level. Natsoulas (1981) saw 'being aware of being aware' as the problem of introspection and claims that it is distinct from the problem of awareness in the sense of experience. But this depends on hypothesizing experience without consciousness so that "one can countenance a bat that perceives its environment and feels its body but does not know that it does so." (p. 150). The problem with this formulation of unconscious 'perception' and 'feeling' is not so much whether such phenomena are possible but whether it is possible to talk about and use such concepts with sense. Does defining 'perception' and 'feeling' as unconscious disallow knowledge of how such concepts can be used?

Certainly it is difficult to imagine 'consciously' what unconscious perception may involve but does that mean that it is logically impossible to express such a concept in language? It was questions of this sort that gave rise to 'logical positivism' and contemporary developments in the philosophy of science, which will be briefly discussed in Section 1.8 below. While theoretically expedient, making a distinction between 'conscious' and 'unconscious' hides important differences between the usual ways of speaking about these phenomena.

The difficulty is that an 'awareness' must serve two purposes in theorizing. Firstly, it must be a describable and distinct event. It must have 'unique dimensions of characterization'. Secondly, it must be that which produces, and therefore is in some way connected to, the phenomenon of awareness of particular contents. The former purpose is involved in developing an *objective* account of awareness. The latter purpose is involved in explaining the *subjective* experience of being aware of particular contents.

Mandler (1975), in a discussion of consciousness, used the construct of the unconscious in a different way from Natsoulas (1981). For Mandler (1975) it was the result of thinking, not the process of thinking that appeared 'spontaneously' in consciousness. He believed that "the solipsisms and sophisms of philosophies of mind" are avoided by emphasizing that "the conscious individual cannot be conscious ... of theoretical processes involved to explain his actions" (p. 231). Similarly, Ullman (1980) stated

that "the perceptual processes are not necessarily open to conscious introspection" (p. 380). However, the philosophical solipsist could well ask how unconscious processes 'spontaneously' give birth to consciousness. As Miller (1980) expressed with clarity;

...the discrepancy between a computational system that exhibits conscious awareness and a computational system that does not requires some comment. Either consciousness will be dropped from the list of cognitive phenomena, or the unconscious system will remain a metaphorical account of the conscious system. Neither alternative is attractive. (p. 146).

In simple terms, behaviour may be explicable in terms of 'unconscious' cognitive processes but is consciousness?

Returning to Natsoulas (1981), the 'intrinsic character' of awarenesses seems analogous to Nagel's (1974) 'subjective character' of experience. Yet, while Nagel (1974) admitted that this essential subjectivity is ultimately beyond the scope of human concepts, Natsoulas (1981) apparently considered that the 'intrinsic character' of awarenesses is the very thing that a theory of consciousness should aim at encompassing in human concepts.

As was mentioned with regards to theories of perception one of the difficulties with theories of consciousness is determining where *meaning* enters the process. If meaning is *not* an aspect of consciousness then an extremely careful analysis of 'meaning' as a concept is required. (The 'Skinnerian' understanding of meaning is an attempt at just such an analysis- see Chapter 2.) If meaning *is* an aspect of consciousness then, in Natsoulas' (1981) terms, it must occur in either the 'intrinsic character' or the 'contents' of an awareness. In this case the difficulty again is in explaining how the content of an awareness might be said to refer to an intrinsic character which by definition is distinct from any contents.

Yet if it is not the 'contents' but the 'intrinsic character' that carries meaning then the distinction between content and intrinsic character collapses. This is because it would be difficult to defend as meaningful talk about contents that by definition are considered to be meaningless when taken on their own. Everything would then be a matter of 'intrinsic character' and nothing could sensibly be termed 'contents'. And if there is no distinction between

contents and intrinsic character then perhaps Marx and Hilix (1979) were correct in saying that consciousness is only a tool of study and not an object of study.

However, by invoking reflexivity this conclusion can be shown to be as paradoxical as attempts at forming a coherent theory of consciousness. Psychologists should be perfectly able to study and theorize about whatever appears as or is called consciousness if actual consciousness is truly an 'unknowable tool'. This is because no *a priori* limit can be set on how an 'unknowable tool' can or should be used. To set such a limit -for example, that consciousness should not be studied- assumes that it is known that the unknowable tool cannot be studied. Possibly, what is implied in stating that consciousness should not be studied is that; (a) the commonsensical notions of consciousness characterize it correctly, and, (b) such a consciousness is incapable of being studied.

Skinner (1974) suggested that this stance is taken by methodological behaviourists and criticized them for thus allowing the existence of the mental world. It is true that some species of mental world seems to characterize the predominant commonsensical notions about consciousness. In particular, the commonsense belief seems to involve, as an essential element, a private mental world. As Mandler (1975) said;

The individual experiences feelings, attitudes, thoughts, images, ideas, beliefs and other contents of consciousness, but these contents are not accessible to anyone else. Briefly stated, that is the special problem facing psychologists. There are no evasions possible. (p. 231).

This is the doctrine of 'privileged access' mentioned in the previous section in a quote from Dennett (1979). Further discussion of the question of privacy arises in Chapter 2, Sections 2.3 and 2.4 and in Chapter 5, Section 5.3.4-- in overviews of the radical behaviourist and 'Wittgensteinian' approaches, respectively.

Once a mental world is accepted then the mental can be regarded as having either a causal or non-causal role in the physical world. These possibilities, of course, are the traditional positions taken by philosophers on the mind-body problem. Postulating a causal role for the mental world reflects the

philosophical position of interactionism while holding to a non-causal role reflects either epiphenomenalism or psycho-physicoparallelism.

If interactionism is assumed then psychological theories face the problem of explaining how consciousness interacts with the world. If the mental world has a physical substrate then there remains the problem of how meaning, as 'referring' or 'intending', could arise from the physical substrate. However, if the mental world is independent of the physical world then the means of interaction becomes inexplicable almost by definition.

Terms such as 'will' or 'agentic nature' which might be used in attempts to bridge the gap between the mental and the physical have meaning in the sense of being the referents of causal, explanatory *constructs*. Nevertheless, they seem to lack meaning in the sense of having 'unique dimensions of characterization' that are distinct from the behavioural phenomena they seek to explain.

Alternatively, if epiphenomenalism or psycho-physicoparallelism are assumed then the familiar solipsistic difficulties are encountered. That is, if consciousness is an epiphenomenon then it is difficult to explain how an epiphenomenon could be said to have 'knowledge of' the phenomena of which it is an epiphenomenon. (At least that is, without making arbitrary assumptions about the nature of the world. And, of course, as discussed above in Section 1.2, it is the apparent arbitrariness of such assumptions that is at the heart of much of the theoretical disunity in psychology.) The 'intentional' connection that links theoretical constructs to the phenomena they refer to would thus be undermined. This in turn would weaken any claims to knowledge of the world 'as it is'.

For example, if consciousness were an epiphenomenon -in the way in which the noise of an engine is to the functioning of an engine- then is it possible to even imagine how such a noise could ever meaningfully refer to anything, including the fact of its being a noise?

An alternative to all of the above approaches to consciousness is a strict physical monism. This position is found in the interbehavioural psychology of Kantor as the assumption of naturalism, and in the radical behaviourism of Skinner. In Chapter 2 radical behaviourism will be examined to determine how satisfactory it is as a treatment of consciousness and reflexivity in general.

While the above discussion is an extreme simplification -a more detailed account is presented by Weimer (1976)- the aim was to show that contemporary attempts in psychology to understand consciousness are founded on the traditional philosophical positions taken on the mind-body problem. These positions all have their idiosyncratic difficulties. The claim made here is that the difficulties arise from an inability to accommodate the two views of meaning. That is, meaning as 'reference' (the mind) and meaning as 'activity over time' (the body). Attempts to explain how meaning as reference might arise in the natural order themselves risk becoming meaningless since it is unclear what the referents of their own explanatory constructs could possibly be.

It is because of this difficulty that a philosophical investigation of meaning is considered necessary before satisfactory psychological theorizing on consciousness can be achieved. Despite claims by some ((e.g.) Libet's (1985) attempt to combine "unconscious cerebral initiative" and the "conscious will" -p. 529) perhaps Hilgard (1980) was right when he said with respect to the mind-body problem;

My reaction is that psychologists and physiologists have to be modest in the face of this problem ... I do not see that our methods give us any advantage [over philosophers] at the ultimate level of metaphysical analysis. (p. 15. Brackets added).

But Hilgard (1980) does advocate what he terms a 'heuristic' use of the concept of consciousness. Whatever, it is a fact that consciousness is once more being widely discussed in psychology. Neisser (1979) stated, "I am not sure whether psychology is ready for consciousness even now" (p. 100) but many psychologists are prepared to take the risk that it is ((e.g.) Globus, Maxwell and Savodnik, 1976; Hilgard, 1980; Mandler, 1975; Natsoulas, 1978a; 1978b; 1981; 1983).

1.6.2 THE 'SUBJECT' IN PSYCHOLOGY

Associated with the revival of interest in consciousness within psychology has been a discussion in the philosophy of mind literature on the distinctiveness of human consciousness, particularly in connection with the advances made in the field of artificial intelligence ((e.g.) Baker, 1981; Block,

1980; Dennett, 1980; Eccles, 1980; Fodor, 1981; Hofstadter, 1980; Natsoulas, 1980; Searle, 1980). An important corollary to both the philosophy of mind literature and discussion of consciousness in psychology is the nature and role of the *subject*. For the purposes of this discussion 'subject' refers to what Natsoulas (1981) called the traditional view of the subject as a "causal agent self" (p. 156).

Searle (1980) claimed that intentionality is not explicable in terms of "instantiating a computer program" since "it is possible for something to instantiate that program and still not have any mental states." (p. 424). Instead, Searle (1980) considered intentionality to result from the 'causal powers' of the brain. Now, intentionality can be seen as a distinguishing characteristic of a conscious agent. In fact Baker (1981) suggested that formulating intentions is *necessary* in order for something to be an agent. Therefore, arguments about how and where intentionality is produced implicate particular understandings of 'what it is like to be a subject.'

But the idea of an individualized intentional being is itself being addressed with renewed interest in the psychology literature. For example, Harré (1974) produced an embryonic theory of "a human being as a responsible agent, capable of constructing and managing his social world." (p. 243). Later, Harré (1979; 1983; 1984) came to see the mind and even the 'self' as having social origins, which brings the causal explanation full circle.

Because of this the role of reflexivity, at least in social psychological theorizing, presumably becomes vital. That is, to what extent is the social psychologist to be considered as a responsible agent, constructing and managing his social world as opposed to a socially constructed product? It should be noted that the implication that this represents an intractable ambiguity is not being made here. Rather, this dilemma simply emphasizes the difficulty of understanding the place of values in psychology as was discussed in Section 1.3 above.

More radical analyses of the socially constructed and mediated nature of the subject in psychology include Harré (1989), Henriques, Hollway, Urwin, Venn and Wolkerdine (1984), Sampson (1983; 1985; 1989) -for a recent compilation see Shotter and Gergen (1989). In these approaches theoretical problems associated with consciousness and the nature of the subject are avoided by emphasizing the processes that produce and maintain concepts of individualism and personal identity. In particular, Henriques et al (1984)

focused on revealing what influence psychology and psychologists have on the formation of constructs in the social world. Under this view even humanistic psychology is seen as reinforcing individualism (a point made by Krasner (1978) as a reason for the reconciliation of behaviourism with humanistic psychology-- see Section 1.3 above). But even with such radical formulations of the subject the problem of incorporating meaning into the social world, if not into the consciousness of the individual, is still present. The difficulties of a social constructionist epistemology will be discussed in Section 1.8.4. However, brief mention of these difficulties should be made here.

If intentionality is at least an *aspect* of what it is to be a 'subject' then, if the revised theories of the subject and personal identity are intended as assertions- and presumably they are- it follows that a subject of a sort still exists. Whether this subject should be properly understood as occupying the minds of individuals or as the product of some socially mediated process is a question at a different level. That is, primarily, it is the phenomenon of intentionality (meaning as 'reference') that is problematic and relevant to the present discussion, not the ontological status of the subject. This is because the ontological status of the subject *follows* from a referential view of meaning. It is the subject as 'causal agent self' rather than as metaphysical being that needs explicating. To this extent a 'causal agent social process' is just as problematic as a 'causal agent self'.

1.6.3 SUMMARY: 'CONSCIOUSNESS' IN CONTEMPORARY PSYCHOLOGY

An attempt has been made to show how some conceptual problems to do with theorizing on consciousness in psychology stem from two distinct views of meaning. While consciousness is a phenomenon that all people feel able to 'refer to' great difficulties remain in using the construct in a psychological theory. Furthermore, it has been suggested that this distinction is analogous to, and in fact underlies, problems in understanding what it means to be a subject.

Psychological approaches to understanding consciousness have been viewed in this context as reflecting traditional philosophical positions on the mind-body problem ((e.g.) interactionism, epiphenomenalism, psycho-physico parallelism, physical monism). Because of the philosophical basis of

theories of consciousness it is considered necessary to carry out a philosophical examination of the concept of 'meaning'. This will be attempted in Chapters 3 and 4 using the philosophy of Wittgenstein as one possible approach.

1.7 THEORIES OF PERCEPTION IN PSYCHOLOGY

1.7.1 INTRODUCTION

For the cognitive psychologist perception is the basis of all cognitive processes. Conceptually it is an important area for two reasons. Firstly, as Neisser (1976) stated, "perceiving is the basic cognitive activity out of which all others must emerge " (p. 9). If cognition is the activity of knowing then it "seems obvious that we have to obtain knowledge before we can use it" (p. 13). Perception is this process of obtaining knowledge. Secondly, "perception is where cognition and reality meet" (Neisser, 1976, p. 9). Having a clear understanding of this encounter must be essential to any theory of perception, and, because of the first point, any cognitive psychology.

The following discussion highlights some of the problems and debates at this interface between cognition and reality. In the wider sense this discussion will attempt to show once again how different understandings of reflexivity and meaning intrude to create divisions. To achieve this the 'Gibsonian' or ecological approach to perception will be contrasted with what can be termed the 'representational' view of perception.

1.7.2 PERCEPTION AS REPRESENTATION

Fodor (1980) characterized what he called the "representational theory of the mind" as having two basic assumptions. Firstly, "[t]o think (e.g.) that Marvin is melancholy is to represent Marvin in a certain way" (p. 63. Brackets added). And, secondly, "we are in some or other relation to a representation of Marvin" (p. 63. Emphasis added). For the purposes of this discussion the term 'representational theory of mind' will include both

information processing and schemata based theories of cognition and perception. In both approaches reality is mediated in order to be perceived.

The information processing view of perception is part of the "computational theory of mind" (Fodor, 1980, p. 63) and is called "indirect perception" by proponents of "Gibsonian" or "direct" perception (Michaels and Carello, 1981, p. 2). In the computational approach "the regularities of perception must be stated over perceived properties- i.e. over internal representations" (Pylyshyn, 1980, p. 112). That is, the complexity of patterns of behaviour is best explained by hypothesizing the existence of an internal representation from which particular behaviours can be predicted.

It is in this sense that internal representations serve to categorize phenomena in the world. In fact, Bruner (1973) claimed that "all perceptual experience is necessarily the end product of a categorization process" (p. 8). Already it can be seen that the representational approach is emphasizing meaning as 'reference'. A mental entity in some way refers to ('means') the world it represents. This entity explains behaviour just because it refers.

At this point, in order to avoid confusion, it should be noted that Ullman (1980) admits that the "mediating processes in the computational/representational theory do not operate on subjective experiences... nor are they intended to account for their origin" (p. 380). Also, the perceptual processes "are not necessarily open to conscious introspection" (p. 380). Rather, the "complexity of these underlying processes may be veiled by the subjective ease and immediacy of perception" (p. 380). Thus, it is not the subjective experience of perceiving or 'knowing' -or what one 'thinks' one perceives or knows- that a computational approach tries to explain, but, instead, *behaviour*. As has already been noted (See Section 1.6.1) it was because of this inability to explain conscious experience that Miller (1980) found computational theories essentially disappointing.

However, this relegation of perceptual processes to the unconscious is more than disappointing, it also creates severe conceptual difficulties. Miller (1980) feared using the unconscious computational theory of mind as a model of consciousness. But what may be even more deceptive, conceptually, is modelling unconscious computation along the lines of an implicit view of consciousness. That is, the computational/representational account of perception may be employing a vital aspect of traditional accounts

of subjective experience (or consciousness) which Ullman (1980) admits the computational/representational approach cannot explain. That 'vital aspect' is, of course, representation itself.

It is suggested here that the concepts of 'representation' and 'computation' are used most often when the presence of a subject is being implied. This is where the computer analogy has difficulties. For while the computer can be said to have internal representations *from the perspective of the programmer* the machine itself can have no such knowledge of representations. The programmer may be able to compare the computer's physically realized representations with what they represent but the machine must forever be confined to its 'representations.' The computer *qua* machine does not 'compute' (See Harris, 1988, for a very interesting discussion of what he terms the 'language machine').

Heil (1981) made the same point in criticizing Fodor's (1975) computational approach in the following terms;

This is not to deny that we may choose to regard particular goings-on inside a digital computer as standing for various things. But it is we, a community of language-users, who bestow significance on these goings-on. Programmers provide an essential link between their computing machines and the world. (p. 341).

However, subsequently Fodor (1980) made the same point, and quite rigorously, so it would be worth relating it here in some detail. While accepting that there are such things as mental representations Fodor (1980) argued that they are not involved in mental processes via their semantic properties (which include the property of being a representation) but rather through their formal ("non-semantic") properties. He termed this the "formality condition." In his own words;

If mental processes are formal, then they have access only to the formal properties of such representations of the environment as the senses provide. Hence, they have no access to the semantic properties of such representations, including the property of being true, of having referents, or indeed, the

property of being representations of the environment (Fodor, 1980, p. 65).

Fodor (1980) claimed that psychology must *at least* accept this formality condition particularly because it is differences in formal properties that allow differences in causal role. And, "it is hard to see how internal representations could differ in causal role unless they differed in form" (Fodor, 1980, p. 68).

Fodor (1980) concluded that acceptance of the formality condition creates *methodological solipsism*. This is because 'being a representation' is a semantic property of a representation and therefore, under the formality condition, not psychologically explicable. Yet, the only way that a mental state or process can avoid solipsism, so it seems, is by virtue of it being a representation. Fodor (1980) thus deemed a naturalistic psychology of mental states (one which incorporates semantic properties into mental processes) a virtual impossibility and that therefore a computational psychology is all that should be expected.

Despite these arguments for methodological solipsism Fodor (1980) remained certain that semantic properties do exist in that they have something to do with how people are "embedded in the world" (p. 66). As he continued, "it's just that truth, reference and the rest of the semantic notions aren't psychological categories. What they are is: they're modes of *Dasein* ." (p. 71). 'Dasein' is a concept of the philosopher Heidegger and refers to the transcendental situation of being-in-the-world without the Cartesian subject/object split. This as opposed to being solipsistically isolated from the world.

However, Globus (1984) argued that Fodor was wrong to confine solipsism to psychology by asserting the reality of 'Dasein.' Rather, Globus (1984) claimed that even Dasein must be 'supervenient' on the brain. And, after critiquing three theories of perception ('classical representation theory,' 'information pick-up theory' and 'feature detection theory') with regard to their physical realization in terms of brain functioning, he concluded that the brain was necessarily a "windowless monad" (p. 243). That is, the brain operates in brain terms and can never know reality in 'reality terms.' Therefore, solipsism must be the reality and not just a methodological strategy in psychology.

This brings the discussion to the question of how a representational theory of perception incorporates reality. Of course, for Fodor such a theory *cannot* incorporate an independent reality because of the necessity for methodological solipsism. But, traditionally, representational theories have assumed the presence of an independent reality. Katz and Frost (1979) claimed that such representational theories end in the "cognitive paradox" (pp. 41-42). The paradox arises from assuming that perception is determined both by a structured world and a structuring organism who reconstructs the world. According to Katz and Frost (1979), in order to reconstruct the world "a comparison between a mental structure and a real world standard" (p. 42) is required. But under the representational theory of mind no such real world standard is available as that would imply direct access to the real world. And, if direct access were a possibility then what purpose would mental structure serve?

Wilcox and Katz (1981) made similar criticisms of the idea of 'stored mental representations' in theories of memory. Rakover (1983) responded to these criticisms by claiming that the false alternatives of solipsism and direct access are avoided if a "computer-like" rather than a "human-like" model of mental processes is used (pp. 55-56). Solipsism could be avoided, according to Rakover (1983) by making the (familiar) strategic move of dividing the output of a mental process (in this case 'recognition' using a feature analyzer schema) in two. In a way that is reminiscent of Natsoulas' (1981) distinction between the content and the intrinsic character of an awareness, Rakover (1983) hoped to distinguish the content of the product of a feature analyzer schema (which content is provided by "the stimulus itself") from the "categories of observation and analysis" (p. 59). The real world thus enters as content. But, a content that is distinct from "categories of observation and analysis" at the very least is theoretically redundant and unverifiable and at worst is an illusory impediment to a clear account of perception. This is why Bruner (1973) saw categorization as the *whole* of the phenomenon of perception. As he said:

[t]he rather bold assumption that we shall make at the outset is that all perceptual experience is necessarily the end product of a categorization process. (p. 8. Brackets added).

And;

If perceptual experience is ever had raw, that is, free of categorial identity, it is doomed to be a gem, serene, locked in the silence of private experience. (p. 9).

Perhaps 'content' as a theoretical concept could be used as a catch-all term for what has not yet been explicitly shown to be the result of categorization. But that usage would not avoid solipsism which was Rakover's (1983) aim. While pure content may be a compelling commonsensical picture of a person's relationship to reality it remains anomalous. 'Content' -or 'private experience' or "perceptual fulfillment" (Globus, 1984, p. 239)- is, by definition, invulnerable to analysis. To use it as a way of avoiding solipsism is akin to invoking God to avoid meaninglessness.

It is convenient at this point to note the way in which meaning is incorporated into the approaches to perception discussed so far.

For Fodor (1980) meaning does not enter into a psychological theory of the mind at all. Meaning exists, he insists, but has nothing to do with psychologically explaining behaviour. For other representational theories of perception meaningful knowledge of the world is produced as the end product of a mental process. That is, meaning emerges from a pre-meaningful process. This process was referred to by Bruner (1973) in the following terms;

If we have implied that categorizing is often a silent or unconscious process, that we do not experience a going-from-no-identity to an arrival-at-identity, but that the first hallmark of any perception is some form of identity, this does not free us of the responsibility of inquiring into the origin of categories. (pp. 9-10).

Perception from this viewpoint incorporates meaning as a referential ((i.e.) 'categorizing', 'propositional') end-product of a cognitive process. And part of the responsibility of psychology, presumably, would be to theorize concerning this process.

Before seeing how Gibsonian perception incorporates meaning, Neisser's (1976) schemata based theory of perception will be examined.

Neisser's (1976) 'schemata' can be seen as an attempt to amalgamate representational and Gibsonian approaches to perception. For Neisser

(1976), "[a] schema is that portion of the entire perceptual cycle which is internal to the perceiver, modifiable by experience, and somehow specific to what is being perceived" (p. 54. Brackets added). A schema can act as both an information-accepting format and as a plan for finding information to fill the format. Neisser (1976) believed this dual-aspect of schemata to be necessary because, on the one hand, "perception, like evolution, is surely a matter of discovering what the environment is really like and adapting to it" (p. 9). And, on the other hand, "[t]here must be definite kinds of structure in every perceiving organism to enable it to notice certain aspects of the environment rather than others, or indeed to notice anything at all." (p. 9. Brackets added).

However, rather than avoiding conceptual difficulties the dual purpose of Neisser's schemata brings these difficulties into starker contrast. The whole thrust of the 'cognitive paradox' and Fodor's (1980) argument for accepting the formality condition is that perception *cannot* both represent reality as a mental structure and hope to be involved in discovering what "the environment is really like and adapting to it." Simply stating that schemata can do this does not really allay the concerns underlying these criticisms.

If representational perception is caught between solipsism and paradox one alternative is to dispense with representation altogether. Gibsonian perception will now be examined as an attempt to resolve this dilemma.

1.7.3 GIBSONIAN PERCEPTION

Over recent decades an approach to perception has been developed variously referred to as 'Gibsonian', 'Direct' and 'Information pick-up' perception ((e.g.) Gibson, 1966; 1979; Michaels and Carello, 1981). From this, a new approach to psychology has begun to emerge called 'ecological psychology' ((e.g.) Shaw and Bransford, 1977; Shaw, Turvey, and Mace, 1982). A full account of this approach is impossible here. However, points of contrast with representational theories of perception can still be usefully noted.

One of the central concepts of Gibsonian perception is that of *information*. Information "is structure that specifies an environment to an animal" and it "is carried by higher-order patterns of stimulation... complex structures often given over time" (Michaels and Carello, 1981, p. 9). The connection to the environment is direct -thus, 'direct perception'- in that this information is

already *in* the environment and it is immediately 'picked up' by the organism. No processing or internal representations of any kind are required.

The philosophical foundation of this approach has been termed *direct realism* (Katz and Frost, 1979; Michaels and Carello, 1981). The environment is directly perceived (and therefore reality is directly perceived) because, from the ecological perspective, the environment is information.

This point can be clarified by mentioning how 'time' and 'stimuli' are reconceived in ecological psychology. Michaels and Carello (1981) suggested that it is not absolute time -the Newtonian clock ticking away outside the universe- but *change* that is more fundamental to an organism in its environment. And this leads to an emphasis on *events* as stimuli rather than moment-by-moment sensory 'snapshots'. An event "lasts as long as it has to" (p. 10) in that it provides particular information -manifest over (absolute) time- specifying a particular environment.

Thus an organism can be said to have perceived a particular event when it can be shown that an organism's history of activity corresponds, in the ideal research situation, to the picking up of exactly *this* information. More to the point, what the organism must be shown to have 'picked up' (the term 'pick up' is not really adequate as it can appear to imply 'recognition' which is part of the mentalistic paradigm that the ecological approach seeks to avoid) is the environmental *invariant* comprising the particular information.

An invariant is that specification in a pattern of energy stimulating the senses over time and space that is unchanged by certain transformations. For example, when a person walks around a rectangular table it must be shown that there is an aspect of the pattern of energy stimulating the eyes that remains constant while walking, and which specifies 'rectangular'. To complete the nomenclature a *structural* invariant is that which specifies an object while a *transformational* invariant specifies an event (Michaels and Carello, 1981, p. 19ff.).

Direct perception challenges two assumptions of traditional thinking in perception. These are;

...the assumed distinction between the object of reference and the object of experience, and the assumption of perception as propositional and error-prone. (Shaw, Turvey and Mace, 1982, p. 161).

These two assumptions are related and can be demonstrated with an example. A (perhaps distracted) perceiver may hear what appears to be the onset of an earthquake when 'in reality' it is only his partner snoring. The object of reference (the partner snoring) and the object of experience (the beginnings of an earthquake) are distinct, insofar as they differ as propositions about reality. The ecological approach, however, would treat the perception of an earthquake nonpropositionally, as part of the ongoing adaptive orientation of the perceiver. That is, the perception of an earthquake may form part of the perceiver's exploratory and investigatory activity leading to a further perception (also treated nonpropositionally) of the partner snoring.

To treat perceptions as propositional can lead only to the philosophical 'black-hole' of unrelenting scepticism. For how is the veridicality of a perception to be judged except by using another perception? By treating perceptions nonpropositionally there is therefore no need to distinguish between the object of reference (which, when treated propositionally, turns out to be another perception) and the object of perception. With the collapse of this distinction perception can be of the real world.

Even with such a brief outline of Gibsonian perception the way in which the concept of meaning is incorporated is evident. The 'meaning' of a perception is not its propositional or referential aspect. A perception does not refer to the world. Rather, from the Gibsonian perspective, the 'meaning' of a perception is to be found in the ongoing activity of an animal in its environment. A perception is not a momentary end-product of a process but is an event in time and space. So the meaning of a perception is to be studied as an activity.

Furthermore, meaning is primary and is not constructed. That is, 'meaning' is the starting point of perception and is to be found in the information the environment provides, *via* the organism's activity. Gibson (1979) termed this providence *affordance*. As Michaels and Carello (1981) explained;

... at its simplest, it could be said that an affordance is what the environment means to a perceiver. ...That chairs afford sitting and cliffs afford avoiding is news to no one; but for Gibson, it is the affordance that is perceived. (p. 42).

And;

To say that affordances are perceived means that information specifying these affordances is available in the stimulation and can be detected by a properly attuned perceptual system. To detect affordances is, quite simply, to detect meaning. (p. 42).

Therefore, for an ecological psychologist it seems that the affordance (the meaning) is the *starting point* of any study of perception.

One possible criticism of this approach reflects its ecological and evolutionary basis. Just as evolutionary biology and ecology have been criticized for inviting essentially tautological 'adaptationist' explanations of biological phenomena ((e.g.) Gould and Lewontin, 1979), so too, 'affordances' could be similarly criticized. For example, if a cliff affords avoidance might it also afford throwing oneself off. If so, then how can it be shown that a *particular* affordance was perceived? Simply by what the person does? Is this not tautological?

Fortunately for the ecological psychologist this criticism arises from picturing the process of perceiving an affordance in representational terms. That is, the criticism assumes that a mental representation of an affordance, or some such thing, is required in order to perceive an affordance. But, of course, affordances are not mentally represented by a perceiver but "belong to animal-environment systems and nothing less" (Michaels and Carello, 1981, p. 42). While calculating exactly which affordance a perceiver will perceive in a certain situation may be an extremely complex task (perhaps requiring as yet undeveloped mathematics and technology) it would be possible, at least in principle. This is because an affordance is manifested in the energy patterns stimulating the senses, and energy is considered an objective, measurable entity.

A more damaging criticism of Gibsonian perception, insofar as it is unanswerable, lies external rather than internal to the approach. This

criticism invokes the issue of reflexivity. Gibsonian perception, or, more accurately, ecological psychology, avoids internal conceptual difficulties (for the sake of argument this will be conceded) only by redefining all perceptual phenomena and concepts at the start. Thus, the criticism can be made that difficulties of perception are simply being denied by edict. Like the fabled emperor dissuaded from trusting the evidence of his own eyes (regarding his nakedness) psychologists may be being dissuaded from trusting the evidence of their own 'minds' (regarding the mental world).

1.7.4 SUMMARY: THEORIES OF PERCEPTION

It has been suggested that different approaches to perception (representational, computational, schemata-based, Gibsonian) incorporate the concepts of meaning and reality differently into their theories. Meaning is constructed (representational), ignored (computational), primary (Gibsonian), or both constructed and primary (schemata-based). Reality is mediated (representational), ignored (computational), directly perceived (Gibsonian), or both mediated and directly perceived (schemata-based).

In simplified terms the representational, computational, and schemata-based approaches to perception are faced with the dilemma of either solipsism or paradox. Gibsonian perception avoids this dilemma but perhaps only by the strategy of programmatic denial.

Whether it is necessary to decide between the different approaches relates to the issue of unity versus plurality in science already discussed (Section 1.2). But, the question of whether it is possible to make such a decision must wait for an answer until after an examination of the concepts of 'meaning', 'knowledge' and 'reflexivity' is carried out.

1.8 THEORIES OF KNOWLEDGE IN PSYCHOLOGY

1.8.1 INTRODUCTION

Epistemology is of interest in the present discussion since theories of knowledge are related to understandings of reflexivity in all three senses defined in Section 1.1. What is of particular relevance, and that which will

now be outlined, is the debate in the literature as to what knowledge does and should involve in terms of psychological theories. Consistent with the discussions presented above, the aim of this section will be to reveal implicit views of the concept of 'meaning' in the various proposed epistemologies.

Critiques of three approaches will be discussed. First, what has been called the "positivist program" (Gergen, 1979) and, one of its offshoots, the "standard view of science" (Manicas and Secord, 1983) will be presented. Second, the "realist" view of science as outlined by Harré and Secord (1972), Harré (1974) and Manicas and Secord (1983) will be discussed. Third, the "social constructionist" approach to knowledge as described by Gergen (1985; 1986; 1988) will be outlined.

1.8.2 THE POSITIVIST APPROACH IN PSYCHOLOGY

As is usually the case, an implicit approach is often first explicated by those critical of the approach. Gergen (1979; 1985) mentioned some psychological assumptions he thought implicit in what he termed the "positivist program." In particular, he emphasized that this program was based on a subject-object dualism (Gergen, 1985). Thus, Gergen (1979) believed that psychology was inheriting its most basic assumption about what a psychological being is, from the positivist philosophy of science. As he remarked, the positivist philosophy of science assumes that there is "a world of palpable substance that may be explored and understood through proper employment of our human faculties" (Gergen, 1979; p. 195). That is, the "dualist" epistemology underlying positivism presupposed a particular psychology.

Gergen (1979) also listed other psychological assumptions of the positivist approach. The list included the distinguishing of cognitive from affective processes and seeing the latter as inferior in the "quest for fundamental truth." But it is the presence of the untested assumption that there is an independent subject exploring an independent world that is at the heart of Gergen's criticisms. In summary, knowledge, in the positivist approach, involves discovering what the world is like.

One manifestation of the positivist program has been termed the "standard view of science" by Manicas and Secord (1983). They described several philosophical aspects of this view including; a foundationalist epistemology

(in which scientific propositions are founded on "facts"), a "Humean" conception of causality (in which "causal relations are regular contingent relations between events", Manicas and Secord, 1983, p. 400), and a conception of explanation as subsumption under a law. That is, something is explained when it can be shown to be an example of a general principle.

The accuracy of this characterization of the "standard view of science" will be judged when the realist alternative presented by Manicas and Secord (1983) is discussed. But for the moment this characterization will be accepted as accurate. Of present interest is the exploration of the philosophical roots of foundationalist epistemology.

The assumption that propositional knowledge, if it is knowledge at all, must be founded on an axiom that is absolutely indubitable served as the motivation for the famous meditations of Descartes. According to Descartes, radical doubt must stop with the axiom "I think, therefore I am" because doubting must involve thinking and to think is to be. It is impossible, so the argument goes, to think and not to be.

Husserl's (1960) not quite so famous meditations on Descartes' meditations, however, claimed that Descartes missed the 'transcendental turn'. Essentially, Husserl (1960) believed that Descartes made the mistake of considering the 'I' in his famous axiom to be a "*substantia cogitans*". That is, seeing the 'I' as referring to a substantively existing ego. As such, this ego of substance, indubitably known in the content of an axiom, could be the "foundation for a deductively *explanatory* world-science, a *nomological* science" (Husserl, 1960, p. 24).

But, according to Husserl (1960), that the 'I' has substance is not to be found in the observation of one's thoughts. Rather, the 'I' of phenomenological experience is the "transcendental ego". In simple terms this "ego" is prior to *any* knowledge claim (including Descartes' axiom) and so cannot serve as the basis of the objective, positive sciences. The 'I' *referred to* as substantively existent simply cannot be the 'I' that is *actually* thinking Descartes' axiom.

It follows from Husserl (1960) that if psychology tries to be a positive science it must accept Descartes' 'ego'. Yet this acceptance entails ignoring the transcendental ego. In the context of this thesis the problem of leaving out the transcendental ego *is* the problem of reflexivity. For the transcendental

ego provides the 'space' in which reflection (in particular, 'self-reflection') can be pictured as occurring.

Hayes' (1984) behavioural analysis of the concept of spirituality is relevant here. Simplifying Hayes' (1984) analysis, the *spirit* seems to have an equivalent role to Husserl's 'transcendental ego'. Knowing the 'spirit' propositionally is as difficult (and as fundamentally incorrect, in Husserl's terms) as propositionally knowing the ego (as Descartes claimed was possible).

Hayes (1984) likened the impossibility of objectively pinning down the 'spirit' to the impossibility of 'seeing' the perspective from which one's eyes are looking. In fact, whether or not it would make sense to speak of such a perspective is debatable and forms part of the philosophical issue as to what can and cannot be said with sense. This issue is partly responsible for the shift in philosophy that has occurred this century (Ayer, 1985, p. 142) from a concern for 'epistemology' to a concern for 'meaning'.

This extended critique of foundationalist epistemology has deliberately gone further than Manicas and Secord's (1983) critique. For while Manicas and Secord (1983) were content to establish a "fallibilist" epistemology (p. 401), the above discussion has questioned whether *any* notion of a rationally-based epistemology makes sense. In order to retain even a fallibilist epistemology some notion such as "warranted assertibility" (as used by Dixon, 1983) seems necessary. Unfortunately, "warranted assertibility" does not itself seem like a warranted assertion, since determining explicit criteria for what is warranted is the whole problem of knowledge in a nutshell.

Further discussion of the standard view of science occurs in the next section where it is contrasted with the realist view of science.

1.8.3 THE REALIST VIEW OF SCIENCE

The term *scientific realism* has been used to cover a variety of intellectual positions (see Putnam, 1982). But recently within psychology a particular formulation of scientific realism has been put forward (Manicas and Secord, 1983). In Gergen's (1979) terms this realism remains positivistic but challenges the 'empiricist' positivism discussed in the previous section.

A critical review of this formulation can begin by examining its proposed epistemology. If the standard view of science has a foundationalist

epistemology in which the truth of a knowledge claim depends on its correspondence with the 'facts', then this epistemology is rejected by the new scientific realism. Instead, "knowledge is a social and historical product" (Manicas and Secord, 1983, p. 401). Accepting or rejecting a theory ("knowledge claim") is determined by the criteria that a particular science "generates". Nevertheless, according to Manicas and Secord (1983), these criteria are rational (and not purely arbitrary) because a real world exists that is independent of cognizing experience.

However, asserting the existence of such a world itself may not be rationally justified. For if this precognitive world exists its connection to cognition must be unknowable ('uncognizable'). In fact, it is this world's unknowableness that gives it its justifying role (as is the case with the concept of God).

As Mulaik (1984) commented, in the new philosophy of science most philosophers are *ontological* fallibilists as well as epistemological fallibilists. But Manicas and Secord (1984) believed it necessary to have a realist ontology in order to "make sense of scientific change and criticism" (p. 922), and "if both commonsense experience and science are to be possible" (p. 923). But if "make sense of" means little more than "justify" then Leary's (1984) complaint that Manicas and Secord had transformed the "philosophy of science into an apologetics of science" (p. 918) seems understandable. Of course, one person's apologetics is another person's causal explanation. For the realist, making sense of ('explaining') scientific activity involves noting a pattern ((e.g.) that science is 'adaptive') and then postulating a causal mechanism ((e.g.) the efficacy of presuming a realist view of science) to explain the pattern.

This production of a causal explanation involves using retroductive logic. Such logic is exemplified in the statement by Bhaskar (1975) that "given that science [a particular pattern of human activity explicated *by* Bhaskar] does or could occur, the world must be a certain way" (p. 29. Brackets added). The difficulty for the non-realist, however, is that in order to reach the same conclusions as Bhaskar on how the world must be one must initially share his realist view of science.

Manicas and Secord (1983) also wish to reject what they characterize as 'Humean' causality in favour of "a realist concept in which structures have

causal powers" (Manicas and Secord, 1984, p. 923). This causation can be termed "generative". It then follows that;

[the] task of psychology as a science... is to identify patterns in its subject of study, and to try to conceive of the means of production of those patterns. (Harré, 1974, p. 243. Brackets added).

Manicas and Secord (1983) claim that this generative causality differs from Humean causality in which "causal relations are regular contingent relations between events" (p. 400). However, in fairness to Hume the following quote from his *A Treatise of Human Nature* should be considered;

... where several different objects produce the same effect, it must be by means of some *quality* which we discover to be common amongst them. For as like effects imply like causes, we must always ascribe the causation to the *circumstance* wherein we discover the resemblance. (Hume, 1978; Book I, Part III, Section XV, Point 5. Emphasis added).

Hume's point here is that there is a 'quality' that 'generates' the causation. This 'quality', however, cannot be separated from, and is therefore equivalent to, the *circumstance* in which the resemblance is found.

Once again it is the dual aspect of meaning that seems to be creating the distinction between "Humean" and "generative" causality. Humean causality emphasizes the 'meaning as use' conception of meaning, whereas generative causality emphasizes 'meaning as referring' to something. Thus, generative causation involves emphasizing *content* (the substantive thing which can be referred to as the *cause*). For example, Harré (1974) stated;

A real scientist tries to discover what produces patterns which he observes; that is, what mechanisms are responsible for them. He requires that his theories have a certain kind of *content* . (p. 241).

However, in Humean causation when any content is analysed ('thought about', 'reflected upon') it reduces to contingent relations. That is, it reduces to an event or circumstance. The realism being discussed here is essentially

opposed to such a reduction. This opposition seems to arise from the desire to 'make sense' of both commonsense belief and scientific activity as was discussed above.

Ruse (1986) attempted to picture these two views of causality in the same frame using an evolutionary, Darwinian epistemology. Simply put, seeing 'causes' as things "like powers or invisible fluids" has, up to the present, been to the evolutionary advantage of humans (Ruse, 1986, p. 174). Following Wilson's sociobiology, Ruse (1986) proposed that 'epigenetic rules' -essentially developmental constraints- would cause humans to see 'causes' as things. And humans who see causes as things are naturally selected.

However, seeing 'causes' as things does not inhibit humans from realizing that what may be biologically advantageous at present need not mirror what is logically consistent or meaningful. Therefore, "as philosophers, we should not try to make more of the regularities than they are" (Ruse, 1986; p. 174). Thus, Humean causality is the philosophically rigorous view of causality while generative causality is more what humans naturally do.

But this attempt by Ruse (1986) just will not do for the psychologist. Firstly, the whole concept of 'seeing a cause' -either as a 'thing' or as a 'contingency'- is problematic for psychology. Does a psychologist explain 'seeing a cause' in a realist sense, by postulating a causal mechanism for such seeing, or in a Humean sense, by describing a pattern of behaviours called 'seeing a cause'? Secondly, 'epigenetic rules' do not help the psychologist answer the above question. While for the sociobiologist an epigenetic rule may appear to be an adequate causal mechanism to explain the generation of culture from genes, the psychologist/philosopher should be well versed in the conceptual pitfalls of connecting such disparate concepts. For example, generating the mind from the body has never been an easy conceptual task.

In the natural sciences (physics, chemistry) realist causal explanation may appear to be the goal. However, when there is controversy over what a phenomenon actually *is* then the assertion that there is a natural necessity involved, to any degree, in the causal production of an idiosyncratic vision of the phenomenon, may seem to some as nothing more than an attempt at intellectual or ideological imperialism under the cover of the successes of natural science. Thus, claiming that there is an 'epigenetic rule' entailing

natural necessity for any social or psychological phenomenon may appear philosophically objectionable ((e.g.) Gergen, 1985; 1986. See Section 1.8.4).

Finally, and very briefly, for the realist explanation involves postulating an appropriate "contingent concatenation of real structures" (Manicas and Secord, 1983; p. 403). since these structures are real, by natural necessity they produce the phenomenon to be explained. This view of explanation follows directly from understanding causality as generative. And, once again, it will seem a satisfactory (realist) explanation of what an explanation is if one is already a realist.

1.8.4 THE SOCIAL CONSTRUCTIONIST APPROACH

The realist approach discussed in the previous section claimed that knowledge, including scientific knowledge, is a "social and historical product" (Manicas and Secord, 1983; p. 401). Despite this there could still be valid rational criteria developed within each of the sciences to assess that knowledge.

In contrast, social constructionism, while agreeing that knowledge is a social and historical product takes a far more radical position on the problem of knowledge. Social constructionism, according to Gergen (1985);

... begins with radical doubt in the taken-for-granted world -whether in the sciences or daily life- and in a specialized way acts as a form of social criticism. (p. 267).

All and every theoretical term in psychology is open to a social constructionist analysis aimed at undermining the 'reality' of such a construct. The social origins of "assumptions about the mind -such as the bifurcation between reason and emotion, the existence of motives and memories, and the symbol system believed to underlie language" (p. 267) are all open to inspection. While the realist perspective of Manicas and Secord (1983) still has as its aim the construction of theories that provide causal explanations, social constructionism has as its aim the ongoing criticism and, in a special sense, debunking of such explanations.

These epistemological conclusions are linked by Gergen (1985) to the realization that scientific theory does not reflect or map reality "in any direct or decontextualized manner" (p. 266). Given this, for the social

constructionist any attempt in psychology to reflect or map reality must be subjected to exhaustive social analysis and criticism. This contrasts with the assertion by Manicas and Secord (1983) that "it is precisely the task of science to invent theories that aim to represent the world" (p. 401).

What is important to keep clear is that the criticism made by the social constructionist is not aimed at discovering which psychological theory can withstand the greatest social criticism and thus to serve as a method of theory assessment. Rather, social constructionism aims to portray *all* psychological knowledge as a social product. And a social process can only be a non-rational cause and not a rational justification. Thus, knowledge is not rationally justifiable.

This distinction between causation and justification is part of what Toulmin (1976) saw as a continuing source of philosophical perplexity;

... we are still unclear about the relationship between the ideas of *rationality* and *causality* -between what is involved in discovering the "causes" influencing a person's thoughts or actions and the "reasons" he had for thinking and acting as he did. (p. 45).

From this perspective a simplistic description of the difference between the realist and social constructionist follows. The realism of Manicas and Secord (1983) is a *rational* account of *causality* in scientific theorizing while the social constructionism of Gergen is a *causal* account of *rationality* in scientific theorizing. Social constructionism, by giving a causal explanation of knowledge undermines the very possibility of 'knowledge' being 'warranted' or 'justifiable'. As Gergen (1985) stated;

Yet although casting doubt on the process of objective warranting, constructionism offers no alternative truth criteria. Accounts of social construction cannot themselves be warranted empirically ... the success of such accounts depends primarily on the analyst's capacity to invite, compel, stimulate or delight the audience, and not on criteria of veracity. (p. 272).

Such an open confession of the primary efficacy of methods of persuasion traditionally perceived as non-rational may disturb some. However, both

those so disturbed and Gergen may be missing a vital point -a point central to Wittgenstein's (1969) work *On Certainty* .

In short, for Wittgenstein (1969) both the concept of absolute objective certainty and absolute doubting are equivalent in their being senseless, and not just impossible. In detail, Wittgenstein (1969) critiqued G.E. Moore's famous essay *Proof of an External World* in which Moore claimed to know for certain, while holding up his hand, that "Here is a hand". According to Wittgenstein (1969), Moore's mistake was to equate a situation where it makes sense to doubt with the situation of knowing for certain. Rather, for Wittgenstein (1969), where there is no doubt there is no knowledge (O.C. 121).

The idea of absolute certainty ('final objective warranting') presupposes the possibility of a 'super doubt'. That is, the possibility of doubting everything. For Moore, when the process of doubting becomes nonsensical -the 'super doubt', as it were, self-destructs- what is left is certain knowledge, as it was for Descartes. Wittgenstein's (1969) counter to this attacks the possibility of a 'super doubt';

If you tried to doubt everything you would not get as far as doubting anything. The game of doubting itself presupposes certainty. (O.C. 115).

Doubting requires language. A 'super doubt' would leave no language intact in which to doubt.

For Wittgenstein (1969) this presupposed certainty is the only kind of certainty there is and it is *not* knowledge:

I should like to say: Moore does not *know* what he asserts he knows, but it stands fast for him... (O.C. 151).

And;

I do not explicitly learn the propositions that stand fast for me. I can *discover* them subsequently like the axis around which a body rotates. This axis is not fixed in the sense that anything holds it fast, but the

movement around it determines its immobility. (O.C. 152).

These "ordinary certainties" (Finch, 1977) are not explicit, immutable ontological propositions. Rather, they are *taken* as certain rather than known as certain (Finch, 1977; p. 222). They simply are not doubted in actual practice. As Wittgenstein (1969) stated;

As if giving grounds did not come to an end sometime. But the end is not an ungrounded presupposition: it is an ungrounded way of acting. (O.C. 110).

So, Gergen (1985) was 'wrong' to doubt "the process of objective warranting". This is because, as Finch (1977) noted; "Objective certainty has no grounds *because it is itself what we take as grounds.* " (p. 231).

Gergen's radical doubting thus verges on the 'super doubt' described above which Wittgenstein (1969) variously termed "idle" (O.C. 117) and "illusory" (O.C. 19). "Idle", because by raising doubt to the status of methodology it ultimately produces nothing. "Illusory", because such doubting is linked to the concept of the possibility of certain knowledge, and as such is senseless.

Therefore, social constructionism can be seen as an invitation to accept *different* objective certainties -those which facilitate radical doubt. More accurately, it does not even involve acceptance, which may imply rational assessment. It simply involves doing things differently. As Finch (1977) explained;

We do not ... *start* with knowing. There is no given which is epistemologically primary. Rather we start with acting-with-certainty... Ordinary certainties are the roads on which we walk without question, not because they are the only *possible* roads or the *right* roads... but because they are the roads which we *are* on, and no occasion has arisen for leaving them. (p. 229).

For the moment the following conclusion is all that is required. Social constructionism, as outlined by Gergen (1985), does not finally avoid the epistemological problem of how we know what we know. To the extent that, viewed from the perspective of 'meaning as referring', social constructionism makes a *knowledge claim* -that knowledge is a social and

historical product and as such cannot be objectively warranted- it undermines itself. To the extent that, viewed from the perspective of 'meaning as use', social constructionism is a language activity, it is senseless to speak of rationally deciding between it and any other language activity. There is no neutral ground outside of all language activities from which to make such a decision.

So, social constructionism does not reconcile the two aspects of meaning. But the task is clarified. Causal understanding -'meaning as use over time'- and rational understanding -'meaning as reference'- must converge; and must be seen to converge whichever approach is followed.

1.8.5 SUMMARY: THEORIES OF KNOWLEDGE IN PSYCHOLOGY

Positivism, realism and social constructionism, the three theories of knowledge discussed above, can be characterized as follows. Positivism and realism both assume the existence of a real, independent world. The realist view suggests that science explains this world by hypothesizing the existence of structures possessing causal properties which generate the phenomena of the world. The 'standard' positivist view suggests that science explains this world by showing that a contingent relationship between events instantiates a general law.

Thus, for realism an explanation is achieved when an appropriate causally generative structure can be *referred to* . In contrast, positivism explains in terms of *contingent events occurring over time* . This distinction parallels the distinction made previously between 'meaning as reference' and 'meaning as use over time'.

Social constructionism attempts to avoid this dichotomy by undermining the epistemological and ontological status of a real independent world. This is done by critically analysing the usage of such a concept and showing it to be determined by social and historical factors. However, social constructionism can itself be analysed as being based on the same type of implicit knowledge claims as the approaches it criticizes. And, social constructionism could not avoid this analysis by claiming that it is not making a knowledge claim because that claim *would* be a knowledge claim.

It is suggested here that even social constructionism is unable to reconcile the two aspects of meaning.

The reason for the controversy over the nature of psychological knowledge can be demonstrated using two examples from the literature. Crawford (1985) saw the possibility that the 'new realism' of Manicas and Secord (1983) could be used to justify and integrate the technological and professional sides of psychology. In essence, realism, once accepted, would justify the *application* of psychological knowledge.

In contrast, Koch (1981) spoke of the essential ambiguity and uncertainty of the human condition. That realism, social constructionism or *any* epistemology should be used as an intellectual sedative to alleviate the pain or remove the necessity of facing this uncertainty would be anathema to Koch. Even tentative justifications such as those advanced by Crawford (1985) would dull the psychologist's moment by moment awareness of this uncertainty and therefore lose sight of the responsibility present in the application of knowledge. Poetically, Koch (1981) warned;

The false hubris that has been our way of
containing our existential anguish in a
terrifying age has led us to prefer easy yet
grandiose pseudoknowledge to the hard and
sparse fruit that is knowledge. (p. 269).

So the question of knowledge takes on a moral tone when knowledge 'enters' the world through application. The question of how knowledge (or thought) interacts with the world, if answered, will determine the issue of reflexivity. A consistent answer to this question can be found in the philosophy of radical behaviourism which is the subject of the following section.

CHAPTER TWO

2 RADICAL BEHAVIOURISM AND ISSUES OF REFLEXIVITY

2.1 INTRODUCTION

Skinner (1974) began his book *About Behaviorism* with the following comments;

Behaviorism is not the science of human behavior; it is the philosophy of that science. Some of the questions it asks are these: Is such a science really possible? (p. 3).

The following discussion will assume that a necessary (though not sufficient) requirement of any answer to the question "Is such a science really possible?" would be a consistent treatment of the issues of reflexivity, as outlined in Chapter 1. It is also assumed that without such a treatment no such singular 'science' is possible. Rather, it would only be possible to have "psychological studies" (Koch, 1981). That is, a collection of disparate approaches. Radical behaviourism -being that form of behaviourism espoused by Skinner (1938; 1945; 1953; 1957; 1971a; 1974; 1984a; 1984b; 1984c)- will be examined below to determine if its treatment of reflexivity is consistent and successful.

Before beginning this examination it will be useful to discuss two related concepts which help reveal the particular difficulty psychology, as opposed to other sciences, has with reflexivity.

Hooker (1975) discussed what can be termed a general or "global" theory in the following way;

... a general theory of a given domain worth its salt is a much more general, encompassing affair than the traditional simple model would have us believe -it has global properties, it covers every aspect of the domain. (p. 155).

Quantum mechanics is such a theory and, according to Hooker (1975), its characteristics include: prescribing the terms in which observations are to be described; specifying what is and is not observable as well as the conditions under which what is observable, is observable; specifying the means and reliability of measurements; and specifying what is causally, statistically and accidentally connected.

Compare this description of a global theory with the following comments by Bartlett (1986) on the invulnerability of "ideological philosophy";

External questions rely upon alien presuppositions not admitted by the position and hence are subject to the charge of *petitio principii*. Often, such questions will therefore make no sense from the point of view of the internal dynamics of the position. (p. 7).

A global theory in psychology risks becoming an ideological philosophy because its "given domain" includes *all* language activity, whether language activity is viewed as the expression of beliefs and desires, as verbal behaviour or in some other way. Therefore, there are no 'external questions' in the purest global theory since all questions are simply more subject matter for the theory. As an example of this Day (1969a) has stated;

In responding to professional language, the radical behaviorist has his own new course to follow: he must attempt to discover the variables controlling what has been said. (p. 320).

To those who are not radical behaviourists this "new course" may seem like a betrayal of the act of communication, a deceptive manipulation of the art of conversation. What is worse, it may seem that the radical behaviourist would no longer be concerned with 'exchanging views' and thus become impregnable to attempts at a rational 'conversion' away from radical behaviourism. However, for the moment, it must be said that these fears do not tell the whole story. The idea that communication involves or should involve an 'exchange of views' is by no means itself beyond debate. 'Grasping the meaning of something' does not necessarily imply that there is a meaning somehow embedded in the sentence or utterance. Therefore, it is possible to claim, like Rorty (1979), that it is not necessary to believe that;

... when we say something we must necessarily be expressing a view about a subject. We might just be saying something - participating in a conversation rather than contributing to an inquiry. (p. 371).

Rorty (1979) even spoke of the need to prevent conversation "degenerating" into an exchange of views. So, at the level of professional debate amongst psychologists there seems no agreement even as to how such debate should be understood.

Radical behaviourism will be discussed below in the context of the possible criticism that it is a particularly dogmatic ideological philosophy that ignores or redefines all phenomena of real interest in psychology. That it is, as Scriven (1972) claimed "a mere monument to the seductive power of ancient fallacies and fantasies" (p. 423). The justification for such a criticism will be examined.

The structure of the discussion will be as follows. Firstly, the concepts of 'meaning' and 'knowledge' as they are understood in radical behaviourism will be discussed. Secondly, the distinctive approach to causality and explanation taken by Skinner will be presented. Thirdly, the role of private events in radical behaviourist explanation will be examined and criticized. Finally, a concluding section will consider how well radical behaviourism, as presented, copes with issues of reflexivity.

2.2 AN OUTLINE OF RADICAL BEHAVIOURISM

The first difficulty in discussing radical behaviourism is that of clearly distinguishing the type of behaviourism that is meant. It is not difficult to find in the literature diametrically opposed accounts of radical behaviourism. For example, Sinha (1982), in summarily dispensing with radical behaviourism, stated;

Classical forms of psychological reductionism, such as Skinnerian behaviourism, solved the problem of understanding mind and mental processes by the simple expedient of ruling them out of the scientific court, and relegating them to epiphenomenal status. (p. 26).

In contrast, Day (1969b) argued for Skinner's non-reductionism, while Flanagan (1980), and Skinner (1945; 1974, p. 16) himself, stated that radical behaviourism rejects the epiphenomenalism implicit in the "methodological behaviourism" of behaviourists such as Stevens and Boring. In fact, the differences between radical behaviourism and what is commonly understood as behaviourism are so great that it may be valid to ask whether Skinner should still be considered a behaviourist (Day, 1969b). A useful and comprehensive guide in answering this question is Zuriff's (1985) reconstruction of behaviourism as a whole which reveals in detail Skinner's position relative to other behaviourists. However, the details do not need recounting here.

Perhaps one reason for such divergent understandings of radical behaviourism can be traced, as Hineline (1980) suggested, to the 'distortions' present in a language that is not used to conveying the kind of world-view necessary to understand what Skinner meant in many of his writings. It certainly seems to be Skinner's view that predilections for 'cognitive' constructs and explanations are to be found in linguistic history rather than in the fact that people perceive their own minds (Skinner, 1989). Hackenberg (1988) took the same argument further by suggesting that the special type of language and explanation favoured by behaviourists is often misunderstood because *everyday* language is constrained by the use of nouns and agent-action terms. These terms, Hackenberg (1988) claimed,

tend to favour mechanistic explanations and understandings of causality (See Sections 2.2.3 and 2.2.4, below, for a discussion of causality and explanation in radical behaviourism).

Among the most distinctive features of radical behaviourism -features that bear directly on issues of reflexivity- are the interpretations it provides of the concepts of 'meaning', 'knowledge' and 'causality'. It is these concepts that will now be examined.

2.2.1 MEANING IN RADICAL BEHAVIOURISM

'Meaning', according to Skinner (1974);

[I]s not properly regarded as a property either of a response or a situation but rather of the contingencies responsible for both the topography of behavior and the control exerted by stimuli. (p. 90. Brackets added).

And again;

One of the unfortunate implications of communication theory is that the meanings for speaker and listener are the same ...that the speaker transmits information, or imparts knowledge ... There are no meanings which are the same in the speaker and listener. Meanings are not independent entities. (p. 92).

In other words, 'meaning' is an intrinsically relational concept that cannot be isolated outside of a functional analysis. That is, 'words', 'thoughts', 'ideas', 'subjective impressions', 'wishes', 'beliefs', 'desires', etc., do not *have* meanings as a property. Rather, any meanings they appear to 'have' result from an analysis of the environmental contingencies which are causally responsible for the form of a response and the control a stimulus exerts over a response.

For example, when someone works at a job for a week the meaning of the purposive behaviour of working is not to be found, according to Skinner, isolated in some internal psychological entity. That is, there is no entity, such as a belief, that *has* a meaning equivalent to "after working for a week I will receive a wage". Instead, the meaning of such behaviour is to be found

in the historical contingencies responsible for the form and occurrence of the behaviour of working.

It is important for Skinner (1983, p. 10) that there is no present internalization of these past contingencies. No representations or rules relating behaviour to consequences are to be found in the organism (Skinner, 1974, p. 84). According to Skinner (1985a) representations are used by cognitive psychologists to explain behaviour "by pointing to conditions present *at the time* the behavior occurs." (p. 295. Emphasis added). As will be discussed below (Section 2.2.3), the necessity for a pre-existing mechanism to generate *purposive* behaviour is rejected by Skinner and is replaced by a different type of causality.

Given this approach to the concept of meaning it is possible to develop a new understanding of where the purposiveness in a particular behaviour is to be located. And, of course, 'purpose' (or 'intentionality') is important in any understanding of the potential for reflexive behaviour in humans.

'Seeing the meaning (or purpose)' of something is itself a form of behaviour. In particular, it is a behaviour that involves 'perceiving' the antecedent conditions and consequences of an event. But to be consistent with a radical behaviourist account this 'perceiving' is not to be modelled along the lines of a representational theory of perception (at least, not one in which the 'meaning' of an antecedent condition or consequence is being represented). Rather, the radical behaviourist's observation of these contingencies is itself susceptible to analysis. In interpreting Skinner, Day (1969b) made an interesting comment in this regard;

In contrast to a view popularly attributed to Hume, Skinner holds that certain events are seen to have their effect upon events ... For Skinner, natural controlling contingencies are observed to take place. Yet the perception in this is not totally trusted: the disposition is there to regard whatever is seen as dependent upon a previous history of reinforcement. What is seen in observation is simply a part of the behavior-game that a man plays, a behavior-game that is often critically and dangerously linguistic. (p. 505).

The view that natural contingencies are actually seen may seem a surprising view for a behaviourist to hold. However, recently Skinner (1985b) has stated that while behaviourists often say that perceiving is behaving, this is not the whole story. For example, seeing something like a tree involves "responding up to the point of specific action", and "it is the product of many instances in which action has followed" (p. 76).

Importantly, this seeing does not involve inference between what is seen and how the world is (Skinner, 1974, p. 75). Instead, it is reminiscent of the phenomena-in-itself of the phenomenologist. However, it seems to differ from the phenomenological account in that while, in any particular instance of seeing and behaving, it comes first temporally, it is in fact the historical *product* of many occasions where action has followed. What is seen is not the foundation or cause of the following behaviour. (See Section 2.3 below on 'causality' in radical behaviourism). That is, behaviour is not explained in terms of psychophysical sensory data arising from the perceptual process.

Given all of the above, it then becomes possible for a person to 'see' that he or she has 'seen' natural controlling contingencies in a certain situation and, further, to 'see' a connection between 'seeing' these contingencies and subsequent behaviour. It is at this point, that verbal behaviour might arise that refers to the purposivity of behaviour. But for the radical behaviourist this seeing of a connection is a product of previous contingencies of reinforcement, if it is anything, rather than a cause of the subsequent verbal behaviour. The cause remains the history of reinforcement.

At the risk of deviating from Skinner's own understanding of this concept of 'seeing', further elaboration is required. Since this seeing is the common product of many instances of a large variety of different behaviours including the behaviour of introspectively identifying what is seen, presumably it has no describable characteristics. This is because describing is itself a behaviour which is determined not by the properties of what is described but by the particular history of reinforcement an organism has been subjected to with regards to its 'describing behaviour'. This is a similar point to the one made in Chapter 1, Section 1.6 where the difficulty of specifying the content of consciousness was discussed. However, despite this necessary restriction on identifying 'what is seen' independently of the behaviours which follow it, Skinner (1985b) still stated;

Whatever it [seeing something] is physiologically... it cannot have been strengthened by reinforcing consequences until behavior followed. But it can occur whether actions follow or not. (p. 76. Brackets added).

In psychological theorizing the danger of making such comments is that it could be inferred that 'what is seen' has a physical, and hence a causal, role in a *psychological* account of behaviour. This was the point Schnaitter (1984) made when he expressed concern at Skinner's propensity for tying operants and stimuli to factors specifiable in the language of physics ((e.g.) Skinner, 1983, p.16). While this is a methodologically advantageous strategy in that it adds rhetorical support for an experimental analysis of behaviour, in the present context such an ontological assumption can be misleading. Skinner (1945), in criticizing the methodological behaviourism of Stevens and Boring commented;

What is lacking is the bold and exciting behavioristic hypothesis that what one observes is always the 'real' or 'physical' world (*or at least the 'one' world*). (p. 293. Emphasis added).

The afterthought in the brackets suggests that Skinner's bedrock philosophical position is monism rather than physicalism.

Schnaitter (1984) believed that while it may be unarguable that an operant is a physical event, "it is far from clear that an operant class itself specifies a category of physical event expressible in terms *per se* (contrary to type physicalism)" (p. 12). Further, Schnaitter (1984, p. 11) suggested that the operant analysis of behaviour is inconsistent with "type physicalism" in which an operant class could be translated with a one to one correspondence into a class of physical event. A similar point has been made by Fodor (1981) in order to defend a functionalist account of mental states.

To summarize: according to radical behaviourism 'what is seen' in perception is the one world. This world is not necessarily the world of physics. In fact, as will be argued below, to 'know' what the substantive nature of this world is may be inconsistent with the 'one world' assumption. The most impressive aspect of this assumption is that what is usually termed perception -that is, seeing objects, hearing sounds, etc.- can be

treated exactly the same as less tangible phenomena. For example, phenomena such as 'seeing' the meaning of what someone has said, 'seeing' a person's emotions, attitudes and thoughts, 'seeing' the answer to a problem or its cause and, of course, 'seeing' the natural contingencies of behaviour. Thus, according to Hocutt (1985);

...a knowledgeable observer can quite literally
see a man's emotion in the flush of his face,
hear it in the shrillness of his voice, and *feel*
 it in the menace of his posture. (p. 81).

Defined in this relational way, meaning, for radical behaviourism, becomes the central subject matter of psychology. Following on from this approach to meaning, the concept of 'knowledge' can be re-examined from the radical behaviourist perspective.

2.2.2 KNOWLEDGE AND RADICAL BEHAVIOURISM

Parrott (1983) stated that there are two main classes of 'knowing' or 'knowledge' that Skinner refers to. The first class is *contingency shaped knowing*. Skinner (1974, p. 138) subdivided this knowledge into the following three categories:

- (a) knowing through *direct contact* -(e.g.) to know sorrow;
- (b) knowing *how to* do something -(e.g.) to know how to open a window; and,
- (c) knowing *about* things -(i.e.) being able to carry out certain behaviours with respect to these things.

The second class is *rule-governed knowing*. This type of knowing involves being able to state "instructions, directions, rules or laws" pertaining to a particular situation. It may also involve being able to carry out effective behaviour because of exposure to these rules. However, Skinner (1974) stated;

Knowledge which permits a person to describe contingencies is quite different from the knowledge identified with the behavior

shaped by the contingencies. Neither form implies the other. (p. 139)

That is, there is an independence between behaviour under the control of contingencies pertaining to stating and following rules, and behaviour controlled 'directly' by environmental contingencies.

As a footnote, to remain consistent with the understanding of meaning discussed above the important realization must be made that there is no meaning *in* a rule that determines how it is to be followed or, in fact, stated. There is no 'Platonic Idea' awaiting expression or manifestation as a verbal rule.

In the context of this discussion scientific knowledge is a particularly relevant type of knowledge. Scriven (1972) commented that Skinner "in his overweening commitment to the natural-sciences model for psychology" believes in "objectivity as separation" and thus has ignored "the extreme epistemological significance of the self-referent nature of psychology".

However, this criticism is dependent on a mistaken understanding of the conception of knowledge in radical behaviourism that has been presented above. Scientific knowledge, according to the radical behaviourist, is not just *about the subject matter*. As Lee (1985) has stated, it is "about the subject matter *in its relation to the investigative behavior of observers* ." (p. 188). That is, scientific statements are descriptive rules that specify contingencies "between what an investigator does and what she or he observes as a result." (p. 188).

Therefore, radical behaviourism dispenses with 'facts' in the sense of propositions that characterize the nature of an independently existing world. As Day (1969a) said, Skinner opposes the notion of knowledge as a comment on the *nature* of the object of knowledge. Any interpretation implying that knowledge makes such a comment is, therefore, not scientific. Which is not to say such knowledge is 'invalid'.

However, it may be argued that 'contingency specifying rules' still 'assume' or 'presuppose' a particular metaphysics or ontology which, of course, does comment on the nature of the object of study. But perhaps it is a lack of understanding of the concepts of 'assuming' and 'presupposing' that gives validity to such an argument. That is, firstly, the view that a hidden assumption or metaphysics generates a particular contingency-specifying

rule seems wedded to a type of psychological explanation and understanding of causality that is essentially alien to radical behaviourism. (See Sections 2.2.3 and 2.2.4 on 'causality' and 'explanation' in radical behaviourism, respectively). Therefore the validity of judging radical behaviourism from this viewpoint is debatable.

Secondly, Wittgenstein (1953), in the following remarks, made a point that is relevant to the present discussion;

Disputes do not break out (among mathematicians, say) over the question whether a rule has been obeyed or not ... That is part of the framework on which the working of our language is based (for example, in giving descriptions).

"So you are saying that human agreement decides what is true and what is false?" -It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life. (P.I. 240, 241).

It is suggested here that when someone observes and then questions another's 'assumptions' the disagreement is not a disagreement in opinions but in 'form of life'. (The concept 'form of life' will be discussed more fully in Chapter 4, Section 4.3) In radical behaviourist terms people do not possess such and such an assumption -they simply 'follow' the contingency-specifying rule ('blindly', as Wittgenstein would say). Mathematicians do not "come to blows" over whether $2+2=4$. But that is not because they are all of the same opinion (if that were so what alternative 'opinions' might they have?) but because for them such things as $2+2=4$ are exactly what count as the *framework* of their conversations. This is what Wittgenstein (1953) meant when he said;

If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments. (P.I. 242).

It seems to be a similar insight that is at the heart of Skinner's operationism. For example, Skinner (1945), in criticizing the "arid philosophy" of truth by agreement, stated;

The ultimate criterion for the goodness of a concept is not whether two people are brought into agreement but whether the scientist who uses the concept can operate successfully upon his material -all by himself if need be. (p. 293).

And Skinner (1945) went on to say that it is the 'workability' of a concept that aids agreement rather than the other way round. Such 'workability' can be shown using the mathematical example already mentioned. Ultimately, the 'contingency-specifying rule' of "If you observe '2' and you add another '2' you will get (observe) '4' " says nothing about the *necessary* or *essential* nature of numbers; it simply specifies what to do. And it is this feature of the rule, as it is used, that allows mathematics as an activity to occur. A mathematician trying to explain why $2+2=4$ will only find an answer in terms of the activities of mathematicians doing mathematics rather than in some supposed quality of numbers.

For Skinner (1974) the 'truth' or 'meaning' of rules is not to be found in the logic, or any other property, of the rule. This is because;

... rules are never the contingencies they describe; they remain descriptions and suffer the limitations inherent in verbal behavior. ... a proposition is 'true' to the extent that with its help the listener responds *effectively* to the situation it describes. (p. 235. Emphasis added).

Zuriff's (1980) discussion of radical behaviourist epistemology highlighted this 'pragmatic' approach to truth. Crucially, as Zuriff (1980, p.348) noted, Skinner manages to avoid the infinite regress that begins when the question is asked as to what criterion a response must meet in order to be called 'effective'. Skinner avoids this regress, according to Zuriff (1980), by eliminating the concept of 'choice' in the performance of a response. Scientific knowledge, as behaviour, is not exempt from this analysis.

In fact, it is probably because Skinner is aware of the "extreme epistemological significance of the self-referent nature of psychology " (Scriven, 1972) that he locates scientific knowledge within the subject area of radical behaviourism. Scientific knowledge, then, is not 'chosen' as true because of its concordance with truth criteria, including the criterion of 'effectiveness'. Rather, the cause of this behaviour, as with any other, is to be understood in terms of the distinctive approaches to causality and explanation to be described in the following sections.

2.2.3 CAUSALITY IN RADICAL BEHAVIOURISM

Skinner (1974) rejected the common view of causality in which it is said that "if one thing follows another, it was probably caused by it" (p. 9). According to Hineline (1980) this "adherence to contiguous causality is, in effect, an adherence to a 19th century conception of science" (p. 69). Presumably, Hineline (1980) was thinking of a 19th century conception of science associated most closely with physics. For Skinner (1974) claimed that radical behaviourism employs a kind of causality discovered "very late in the history of thought"; specifically the type of causality used in Darwin's -19th century- theory of natural selection. As Skinner (1974) remarked;

Darwin simply discovered the role of selection, a kind of causality very different from the push-pull mechanisms of science up to that time. ... There was little or nothing in physical or biological science that foreshadowed selection as a causal principle. (p. 36).

One of the advantages Skinner sees in such a view of causality is that purpose can be placed 'after the fact' and can, therefore, reflect on the question of creative design (See Smith, 1983, for a discussion of the analogy between Skinner's environmentalism and the theory of natural selection). In biological science natural selection accounts for the variety and adaptiveness of species through a process of differential survival of randomly, and naturally, occurring variation. The random variation occurs at the genetic rather than the organismic level. Similarly, radical behaviourism accounts for the variety and adaptiveness of behaviour in

terms of the differential survival of randomly varying operants. (The 'randomness' is relative to the area of interest of an operant analysis).

Copious misunderstandings of radical behaviourist concepts occur in the scientific literature because the significance of this view of 'causality' is not appreciated. For example, Williams (1986), in discussing the role of theory in behaviour analysis, has argued that;

... *all* theoretical terms, including those commonly used by radical behaviorists... involve the postulation of unobservable entities or processes as causes of behavior. In other words, theory construction *inherently* entails conjectures about a level of reality not available for direct empirical observation, and the failure of radical behaviorists to appreciate this fact has created a needless schism between themselves and other approaches to psychology. (p. 112).

In citing the example of the concept of 'reinforcement' Williams (1986) insisted that it is being used as an *explanation* of behaviour in the sense of being a generative mechanism. Williams (1986) went even further by suggesting that the tendency to explain phenomena by hypothesizing underlying mechanisms is a fundamental aspect of the nature of human cognition.

Williams' (1986) comments exemplify a phenomenon Day (1969a) has observed among some behaviourists;

It is not so widely recognized that it is possible to 'mentalize' environmental events, as where reinforcers are endowed, often in the thinking of avowed Skinnerians, with some sort of demoniacal power to forge the chains of a reified conception of conditioning. (p. 320).

Reinforcement as a causal principle cannot be reified in this way because its causal role is only ever understood retrospectively. This is clearly Skinner's (1984c) view;

... we discover the events that reinforce an individual's behavior and use them

subsequently for that purpose. Why they are reinforcing is another question.

I know of no way in which a reinforcer can be identified in advance. (p. 704).

Any attempt to understand reinforcement, in a particular situation, prior to a functional analysis involves failing to see the relationship between the observer and what is observed -in this case an instance of reinforcement. There is no stimulus that is reinforcing because of its non-functional characteristics.

In other words, (and contra Williams, 1986) reinforcement, or any other radical behaviourist concept is not to be thought of as an explanation in terms of underlying causal mechanisms. This is because concepts in radical behaviourism do not describe the nature of the world, but instead describe the relation between a behaviour and its consequence. A radical behaviourist does not generalize reinforcement principles into new situations *because* he has 'hypothesized' a common process underlying topographically distinct patterns of behaviour. *That* explanation is an attempt at a logical justification of the behaviourist's behaviour. Rather, the radical behaviourist continues to employ reinforcement principles because that behaviour has, in turn, been reinforced. This approach is taken to ensure consistency. The radical behaviourist's behaviour as a researcher cannot be explained in the 'mentalist' tradition anymore than can the subjects of study (Moore, 1981).

Of course, it can and has been said that this approach makes 'reinforcement' a circularly defined if not tautological concept ((e.g.) Eysenck, 1984, p. 687). Moore (1981) has replied to such criticism by arguing that the term reinforcement is used ('tacted') only when the following conditions are observed:

- (a) The response produces the consequence;
- (b) The response occurs more often when it produces the consequence than when it does not; and,
- (c) The increased responding occurs because the response has that consequence.

According to Moore (1981) such a definition is not circular. However, Paniagua (1985) argued that even this definition is circular since the only way of determining which consequence is reinforcing remains the frequency of response. He did not see this as a problem but simply as a fact. Reinforcement is a relational concept similar to concepts such as 'simultaneity' in physics and 'fitness' in genetics. While it is a "relational concept that requires a relational definition that is inherently circular" (Paniagua, 1985, p. 200) there is no reason to believe it will be any the less useful than relational concepts in other sciences.

2.2.4 EXPLANATION IN RADICAL BEHAVIOURISM

With such a characteristic approach to causation it follows that radical behaviourism requires a distinctive conception of explanation.

In an interesting discussion of the philosophy of explanation Garfinkel (1981) took the lead from Aristotle's *Metaphysics*. In this approach a question that demands an explanation has two terms. The first term is the "substance" term. The referent of this term is always an unchanging subject that does not admit contraries. The second term is the problematic term in which the predicate admits the possibility of contraries or alternatives. For example, in physics, the question "Why does object 'X' have acceleration 'A'?", has a substance term -object 'X', fixed and unvarying- and a problematic term -acceleration 'A'- which could be different.

Furthermore, the form of explanation that is appropriate will be determined by the category type to which the substance term belongs. For example, the explanation of why a *metal bar* increases in length will be of a different form from the explanation of why a *tree* increases in length.

Conveniently, Garfinkel (1981, p. 26) gave an historical example taken from biology of a change in the type of explanation used by scientists. According to Garfinkel (1981), Aristotelian biology attempted to explain why present species exist rather than *other possible species*. In contrast Darwinian approaches attempt to explain why particular species remain extant rather than *become extinct*. The latter explains, using the mechanism of natural selection, the *survival* of species instead of their *origin* -the Aristotelian emphasis.

Analogously, it is proposed here that an "intentional psychology" ((e.g.) Rosenberg, 1986a; 1986b) -that is, a psychology seeking to explain behaviour in terms of 'beliefs', 'desires', etc.- asks why present behaviours occur rather than *other possible behaviours* . To this end it is hypothesized that the beliefs causing the behaviour are in some way invested with an *intensional* character (Searle's, 1979, "intensionality-with-an-s"). The 'intensional' character of a belief relates the object of a belief to the content of that belief. And it is this projective relationship between the content and object of a belief that is used to explain why the behaviour that actually occurs, occurs *rather than* other possible behaviours.

Continuing the analogy, Skinnerian behaviourism, like Darwinian explanations in biology, does not try to explain the origin of particular behaviours but instead seeks to explain why particular behaviours 'remain extant' *rather than* become 'extinct'. The intentionality of behaviours, and the 'intensionality' of behaviour, is explained in terms of differential survival of behaviours, just as teleological aspects of biological adaptation are explained in terms of differential survival. The survival (reinforcement) of a class of operant behaviours depends on the *consequences* that class has in the environment.

Therefore, in giving a causal account of, for example, hunger, Skinner (1974) claimed;

It is a mistake to say that food is reinforcing because we feel hungry or because we feel the need for food... It is the condition felt as hunger which would have been selected in the evolution of the species as most immediately involved in operant reinforcement. (p. 50).

As Hayes and Brownstein (1987) emphasized, for radical behaviourists an adequate explanation must allow both *prediction* and *control* . An explanation emphasizing the analysis of environmental contingencies responsible for the differential 'survival' of behaviours is well suited to achieving these twin aims.

This view of explanation contrasts sharply with those proposing 'capacities' and 'powers' as causes of behaviour. Secord (1984), for example, advised using 'capacities' and 'powers' as theoretical constructs in part to preserve

the, at least, theoretical possibility of some form of "free will" and the "self as agent". Secord (1984) commented:

The potentiality, capacity, or power of a thing depends upon its nature, which must be sharply separated from prevailing conditions. (p. 25).

And, therefore;

From the fact that an individual has the capacity and opportunity to act, we cannot predict that he will act. "Opportunity" cannot be assimilated to external circumstances, as in the case of a thing. (p. 25).

Secord's (1984) position relies in part on arguments presented by Ayers (1968) aimed at refuting determinism. Briefly, in order to justify talk of organisms possessing 'powers', 'capacities' and 'potentialities', Ayers (1968) drew a distinction between *extrinsic conditions* and *intrinsic nature*.

Given this distinction the question arises as to what criteria can be used for making this distinction? This question is particularly important as it is suggested that these powers exist even when they are not being exercised (Secord, 1984, p. 26). Ayers (1968) argued that the possibility of borderline cases between extrinsic conditions and intrinsic nature does not invalidate the distinction. Further, the distinction can be made on *empirical* grounds. For example, in discussing an example of changes to a car Ayers (1968) asked:

Why should altering the position of certain pedals be a part of *testing* a car, while altering the position of some other part would come nearer to a *modification* ? (p. 85).

And answered;

This much surely depends on the *empirical* matter of how a car works, and how to drive it. (p. 85. Emphasis added).

However, a conceptual difficulty arises when this method of distinguishing 'extrinsic' from 'intrinsic' properties is used in theories explaining human behaviour -or even 'human nature'. To use Ayers' (1968) example of a car, it is not simply an *empirical* matter as to how a car works and how it can be

driven. To try to discover how a car actually 'works' and, especially, to work out how to *use* a car implies that there is a single possible answer to those questions. Clearly a car could be used for many things other than driving and could be 'worked' in ways that did not involve internal combustion.

The danger in using the example of a car is that it is too easy to assume that what a car is designed for will -and should- determine an empirical understanding of how it works and how it is to be used. The difficulty is that there is no sensible way in which something understood along the lines of a purpose-built machine could be said to be explained or understood without assuming or taking as given the purpose towards which the machine is designed. Once again, it is the possibility that theorizing has a reflexive aspect that underlies this criticism since the purpose of a machine can ultimately only be given by the assumptions -or in the behaviour- of the theoretician.

In other words, what counts as the 'intrinsic' and 'extrinsic' properties of a thing may not be a matter awaiting empirical discovery but may depend on how the thing is used. Even studying a thing empirically is already using it a certain way. In Chapters 3 and 4 Wittgenstein's philosophy will be discussed and this should help clarify the relationship between a thing's nature (or essence) and its use.

From the radical behaviourist viewpoint, however, powers and capacities are likely to be seen as "fanciful internalizations of contingencies of reinforcement" (Skinner, 1983, p. 10). Apparently Skinner terms them "fanciful" mainly because of what he sees as their total lack of explanatory efficacy. As Skinner (1984) stated:

The objection is not that these things [mental predicates] are mental but that they offer no real explanation and stand in the way of a more effective analysis. (p. 615. Brackets added).

That is, it is possible to answer the question 'Why did the individual perform behaviour A?' by replying that the individual, having powers A', B', C', D', exercised power A' which led to the performance of behaviour A. The question of why power A' was exercised instead of the other powers, Skinner would claim, is no advance on the original question. All that is achieved is the preservation of the concept of "autonomous man". It is this

concept that Skinner (1971a) felt had to be abolished so that the "real causes of human behaviour" could be dealt with, thus preventing "the abolition of the human species." (p. 196).

For this reason, and no doubt others, radical behaviourism avoids *organocentrism* -behaviour understood as a function of internal states- and follows *contextualism* -behaviour understood as a function of context. These terms are borrowed from Schnaitter (1987). (The term 'contextualism' is perhaps preferable to the term 'environmentalism' as the latter may be too readily identified with the physical environment. As already mentioned this identification with the language of physics, while methodologically convenient, is not philosophically necessary to radical behaviourism.) If Schnaitter's (1987) concept of contextualism is made to include the history of reinforcement then the complete behaviouristic explanation is to be found in the *context*. Zuriff (1985, p. 165), in similar vein, confirmed that the history of interaction with the environment is deemed an environmental variable by behaviourists.

A difficulty arises at this point in trying to integrate what have been called 'private events' into such a contextualist explanation. This difficulty will now be examined in detail.

2.3 PRIVATE EVENTS AND RADICAL BEHAVIOURISM

Zuriff (1980) defined private events as "covert events accessible only to the subject and about which the subject may report" (p. 339). Essentially, private events are those events people report that they 'see' or 'experience' when introspecting. Zuriff (1985, pp. 16-28) reviewed arguments about how first-person reports of private events should be treated in a science of behaviour. However, the following discussion will focus on *Skinner's* treatment of private events. Other approaches will be mentioned only by way of contrast.

It has been suggested by Zuriff that it is possible to interpret Skinner's view of private events in two ways. Zuriff (1980) commented that the most consistent and logically feasible view is that "[i]n Skinner's system, private events are theoretical entities, ...they are inferred rather than observed" (p. 339. Brackets added). But, on the other hand, Skinner can be interpreted as

maintaining that private events "are observed stimuli rather than inferred hypothetical constructs" (Zuriff, 1985, p. 234). This apparent ambiguity may have occurred because of Skinner's view of 'seeing' in consciousness. Skinner (1984b) stated:

The heart of the behavioristic position on conscious experience may be summed up in this way: Seeing does not imply something seen. (p. 619).

This approach, of course, applies to other modalities besides vision. The ambiguity, it is suggested here, arises from this distinction between 'seeing' and 'seeing something'. The 'somethings' for Skinner (1984b) are apparently 'actual' or physical objects:

We acquire the behavior of seeing under stimulation from actual objects, but it may occur in the absence of these objects under the control of other variables. (p. 619).

Confusion in understanding private events results from this strategy of appealing to 'actual' objects to explain perception. Zuriff (1980, pp. 343-344) has pointed out that, despite being "inconsistent with the rest of Skinner's radical behaviorism", there remain threads of a "correspondence theory of truth" in Skinner's writings. Zuriff (1980) quoted Skinner's references to reinforcing systems existing prior to any effect on an organism and to an environment that "lies outside the behaving person" (Skinner, 1974, p. 144).

However, it is possible, even likely, that Skinner was aware of the inconsistency apparent in interpreting such comments as references to a metaphysical and transcendently existent world. Perhaps it is simply the case that a verbal community that rarely, if ever, discourages talk of an independent 'real' world as part of what can loosely be called 'self-justificatory' behaviour, establishes a verbal environment in which such comments are more likely. The present scientific intellectual climate may be such that any serious attempt to question the relevance or importance of the notion of the real, independent world is, at best, seen to be of no consequence, and, at worst, is condemned as vague philosophizing or playing with words.

If this is in fact the case there should be no surprise that Skinner anchors radical behaviourism and, more importantly, the experimental analysis of behaviour to this *a priori* reality. For whatever reasons, scientists seem loathe to abandon ontological talk of such a reality as a method of justifying and making sense of scientific knowledge.

If in perception -to return to the question of Skinner's treatment of private events- controlling stimuli can be identified with 'actual' objects then the temptation may remain to view perception as resulting from a dualistic encounter with a transcendent reality. However, it is fundamental to radical behaviourism that a stimulus does not elicit or determine a response, it simply makes it more likely. (Skinner, 1974, p. 74). Since talk of a controlling stimulus is part of 'observing behaviour' then there is no need to speak of a controlling stimulus anywhere else. The intuition that what is seen in the first-person case (one's own 'percept') is somehow the self-same 'thing' as the 'stimulus' defined in the third-person case by an observer is part of the Cartesian picture of the world.

Skinner distinguishes between 'seeing' and 'seeing something' in order to explain phenomena such as dreaming, imagining and remembering. Unfortunately, and probably unwittingly, by denying that seeing behaviour necessarily requires something seen ('actual' objects) Skinner may have helped perpetuate the notion that *sometimes* -when one is not dreaming, imagining or remembering- *something* is seen when one is 'seeing'. And further, that this something is an 'actual' object.

It is clear that Skinner understood, at least to some extent, that this distinction is not sustainable. As he stated;

It is a mistake ... to say that the world described by science is somehow or other closer to "what is really there," but it is also a mistake to say that the personal experience of artist, composer, or poet is closer to "what is really there." ... the behaviors of both scientist and nonscientist are shaped by what is really there but in different ways. (Skinner, 1974, p. 127).

While this shows a rejection of the inherent priority or validity of any one description of the world there remains in the final sentence quoted a shadowy reality that has only one property left that can be described -it has

the power to shape, that is, *cause* behaviour. Zuriff (1980) has noted this "almost Kantian metaphysics " (p. 342) in Skinner's writings. A vestigial, noumenal world, however, has one disadvantage. Like Descartes' apodictically certain "I think, therefore I am" Skinner's "tag end of the world" may rapidly become enlarged and occupied. Candidates for such an occupation are likely to be physically defined 'controlling stimuli' and 'contingencies of reinforcement'. (See Chapter 1, Section 1.8.2 on Husserl's critique of Descartes).

It is unfortunate that Skinner has made comments about "what is really there". It is unlikely that they will be understood in any sense other than a dualistic one.

Common understandings of stimulus and response classes are one example of an area where such dualism can cause conceptual problems. As Zuriff (1985, pp. 48-49) explained, functional stimulus and response classes in practice "must be specified independently" of each other. For example, if a response class is specified functionally ((e.g.) depressing a lever) then the stimulus (the lever) must be specified by "its ordinary dictionary meaning" rather than as a function of the functional response.

However, it is important to note that this is a *strategic* move taken to enable the performance of an experimental analysis of behaviour. This strategy does *not* imply that there must be an ontological 'essence' to such a stimulus. And it certainly does not imply that the ontological essence ((e.g.) 'leverness') of a stimulus somehow 'elicits' or causes the functional response. When "what is really there" is equated with the 'essential meaning' or 'absolute substantive nature' of a stimulus, or any other phenomenon, then the equation is basically dualistic in spirit.

The fact remains that a 'controlling stimulus' is incorrectly understood if it is given some ontological status. Without such status the stimulus is simply an aspect of the behaviour of an observer. 'Actual' objects, as controlling stimuli, remain, quite literally, a third-person phenomenon. By way of comparison it is interesting to note that one of the pivotal distinctions in Wittgenstein's (1953) treatment of psychological phenomena is between the first and third-person cases (See Chapter 4 and Chapter 5, Section 5.3.4).

Any discussion of the problematic nature of private events will include comment on the distinction between the first-person and third-person case. The methodological behaviouristic viewpoint that Skinner (1974, pp. 14-15) criticized for its logical positivist or operationist interpretations of psychological phenomena, was called by Skinner (1974) the "psychology of the other one" (p. 13), after Max Meyer. One effect of this type of psychology is that first-person phenomena reduce to third-person operations. That is;

We cannot measure sensations and perceptions as such, but we can measure a person's capacity to discriminate among stimuli, and the concept of sensation or perception can then be reduced to the operation of discrimination. (Skinner, 1974, p. 14).

Interestingly, the character of sensation -or of the concept of sensation- is that of an instantaneous experience, while the character of an operation is that of a sequence of events over time. So the distinction between the first and third-person cases is reminiscent and perhaps symptomatic of the two types of meaning referred to in previous Chapters; meaning as 'grasped in a flash' and meaning as 'use over time.' Successfully integrating these two aspects of meaning should therefore dissolve difficulties in understanding private events.

The above operationism was criticized by Skinner (1974) because it grants the "existence of mental events while ruling them out of consideration" (p. 15). Alternatively, such operationism could terminate in what Hayes and Brownstein (1987) call "Watsonian metaphysical behaviorism" and thus deny the reality of mental events because they are not publicly observable or verifiable. Skinner is well known for his rejection of such "truth by agreement." (1945, p. 293).

Also, Skinner (1979), as noted by Flanagan (1980), resisted a materialistic reduction of first-person experiences to physiology;

The events observed through introspection were physiological (all behavior was physiological) but they were stimuli and responses, not nerve impulses or states of the nervous system. (p. 295).

No reduction, either physiological or operational, is required because *there is nothing to reduce*. There is nothing to reduce not because a metaphysics is being proposed in which people *delude* themselves into 'seeing' non-existent things. It would, in fact, be a product of the very viewpoint Skinner wished to avoid if first-person experiences were considered to be delusions. Rather, and more simply, there is nothing to reduce because private sensations are interpreted as *behaviour* and not as objects -either physiological or mental. And there is no sense in which one behaviour (having sensations) reduces to another (observing someone 'having sensations').

In fact, it is because behaviourist terms such as 'operant', 'stimulus' and 'reinforcer' are defined relationally and not just topographically that operant behaviours cannot even be reduced into sub-units of operant behaviour. Operants are not determined by physical states of affairs which is why it is a misconception to believe they can be subdivided in any reductionistic sense. In the same way it has already been noted that direct perceptionists believe that it is a mistake to subdivide the 'event' into temporal 'snapshots' (See Chapter 1, Section 1.7.2. Also, see Michaels and Carello, 1981).

Skinner (1974, p. 220; 1984b, p. 619) also distinguished between "seeing something" and "seeing that you are seeing something." The latter behaviour is a result of contingencies set up by the verbal community rather than of natural contingencies. Just as with seeing, "seeing that you are seeing" can occur in the presence or absence of actual objects. The important point is an epistemological one. "Seeing that you are seeing" is not a *confirmation* or *checking procedure*. It produces no additional evidence for the presence or 'reality' of a phenomenon. Instead, "seeing that you are seeing" involves "self-descriptive responses describing the behavior of seeing" even when the thing seen may not be present (Skinner, 1984b, p. 619).

It should now be possible to understand the ambiguity Zuriff (1980) discovered in Skinner's treatment of private events. Skinner (1984b) asked;

What *are* the private events which, at least in a limited way, a man may come to respond to in ways we call knowing? (p. 618).

What private events are *not* are the causes of behaviour (Skinner, 1974, p. 17). Also, private *stimuli* are not the causes of behaviour -they merely indicate (or would indicate) to the observing scientist that a certain response has a certain probability of occurring, exactly as do public stimuli. The private stimulus is to be described and defined in the language of physics, preferably (Skinner, 1957, p. 130). It is this physical stimulus that the behavioural scientist deals with "even if only as an inference." (Skinner, 1953, p. 282). The stimulus is "only an inference" because the technology to observe it in a particular case has not yet been developed or used.

However, in a special sense the private stimulus can be said to be 'observed' or 'known', but -and this is the vital point- not as some referential object. Neither mental nor physical objects are observed in introspection. As has already been discussed, Skinner eschewed such knowing even in the case of perceiving (See Section 2.2.2). Instead 'knowledge' refers to a particular type of behaviour relative to the stimulus to be called knowledge of or about the stimulus.

The special sense of 'knowing' that occurs during introspection is similar to that revealed in the following remarks by Wittgenstein (1953):

It can't be said of me at all (except perhaps as a joke) that I know I am in pain. What is it supposed to mean -except perhaps that I am in pain?

Other people cannot be said to learn of my sensations only from my behaviour, -for I cannot be said to learn of them. I have them.

The truth is: it makes sense to say about other people that they doubt whether I am in pain; but not to say it about myself. (P.I. 246).

And;

"Only you can know if you had that intention." ...(And here 'know' means that the expression of uncertainty is senseless.) (P.I. 247).

Thus, knowledge of private events is like the "ordinary certainties" discussed by Wittgenstein (1969) and already mentioned in Chapter 1,

Section 1.8. In Wittgenstein's terms such knowledge is not properly considered knowledge at all.

Similarly, Skinner's view of private events is related to Wittgenstein's (1953) remark that;

The proposition "Sensations are private" is comparable to: "One plays patience by oneself." (P.I. 248).

In other words, the privacy of sensations does not arise because there is something present ((e.g.) a 'pain') about which only the experiencer knows. Instead, the 'privacy' is simply the fact that the activity is enacted by one individual. And this is so by convention and not by public agreement.

However, as will be discussed in Chapter 4, Wittgenstein's analysis of privacy goes far beyond suggesting that private experience is thus amenable to a functional analysis. For Skinner, concluding that private events can be included in a behavioural analysis was the endpoint of the radical behaviourist treatment of privacy. For Wittgenstein such an understanding of privacy was the starting point for a unique type of philosophizing. Philosophizing that, when directed at radical behaviourism, can produce very different understandings of concepts such as 'control', 'stimulus', 'response' and 'values' than those advocated by Skinner.

The following section will examine how Skinner incorporated first-person reports of private events into an analysis of verbal behaviour. Then, in the final section of this chapter, conclusions will be made as to the adequacy of radical behaviourism, as presented here, in dealing with the issues of reflexivity mentioned in the Introduction.

2.4 PRIVATE EVENTS AND 'TACTS'

In his discussion of verbal behaviour, Skinner (1957) mentioned three types of verbal operants whose prior stimuli are verbal. These three are 'echoic', 'textual', and 'intraverbal' operants. However, there are two types of controlling stimuli that are nonverbal. The first of these is what Skinner (1957) termed the 'audience'. But it is the second type that is of interest here. Skinner (1957) commented;

The other [type of controlling stimulus] is nothing less than the whole of the physical environment -the world of things and events which a speaker is said to "talk about." Verbal behavior under the control of such stimuli is so important that it is often dealt with exclusively in the study of language and in theories of meaning. (p. 81. Brackets added).

The type of operant controlled by such stimuli was termed by Skinner (1957) a "tact." A tact is defined as;

... a verbal operant in which a response of given form is evoked (or at least strengthened) by a particular object or event or property of an object or event. (pp. 81-82).

An important feature of the tact, particularly as regards private events, is that while the tact "is more likely to be 'asserted' than any other type of operant", by itself it is not an assertion (Skinner, 1957, p. 83). Semantic properties such as assertion and other "autoclitic" (Skinner, 1957, p. 311ff.) functions are carried by parts of utterances other than the tact (Skinner, 1985b, p. 75).

A tact is exemplified by the "unique control exerted by the prior stimulus" (Skinner, 1957, p. 83). Consequently, the control exerted by factors such as deprivation state and the audience on the emission of tacts is minimal. Therefore, a listener can infer something about the external circumstances regardless of the condition of the speaker (Skinner, 1957, p. 83). For this reason Hayes and Brownstein (1987) claimed that the purpose of a scientific methodology is to ensure that scientific observations are tacts (p. 212; Also, see Skinner, 1957, pp. 83-84). And the extent to which a verbal operant is a reliable tact depends on the consistency with which a verbal community reinforces the verbal response in the presence of a given stimulus.

It is because of this last point that incorporating first-person reports of private events into an analysis of verbal behaviour presents difficulties. Tacts are set up through reinforcement contingent upon the 'presence' of some object or event. But if first-person reports are, at least in part, responses to private stimuli to which the verbal community has no contact, then can they be considered to be composed of tacts? By definition, the

verbal community cannot reinforce contingent on the presence of a private event.

Without specifying exactly how, Hayes and Brownstein (1987) claimed that "private observations can be tacts given the proper prior history" (p. 212). But, as discussed in the previous section, if private observations result from introspection then the thing 'observed' may be present or absent. Establishing its presence remains a function of the reinforcement contingencies of the verbal community and, therefore, remains problematic.

However, Skinner (1957) was more cautious in applying the term tact to the case of responses to private stimuli. As he stated;

In setting up the type of verbal operant called the tact, the verbal community characteristically reinforces a given response in the presence of a given stimulus. This can be done only if the stimulus acts upon both speaker and reinforcing community. A private stimulus cannot satisfy these conditions. (pp. 130-131).

Rather than calling first-person reports 'tacts' Skinner (1957) spoke of "verbal responses to private stimuli" (p. 131) and "verbal behavior under the control of private stimuli" (p. 130). The contingencies establishing such verbal behaviour under the control of private stimuli were called "defective", by Skinner (1957, p. 134). This is primarily because the verbal community has no direct access to the private stimuli.

As already mentioned, a tact on its own carries no semantic load. Skinner (1957) considered it misleading;

to call a tact an "announcement," "declaration," or "proposition," or to say that it "states," "asserts," or "denotes" something or that it "makes known" or "communicates" a condition of the stimulus. (p. 82).

Instead, it is the controlling relation that makes a tact a tact. Again;

The tact is a relation, not merely a response, and in the absence of a controlling stimulus no relation can be established. (Skinner, 1957, p. 105).

An interesting point, noted by Zuriff (1979, pp. 129-130), follows from all of this. In a physiological experiment it may be possible to train a subject to emit a verbal response if a certain physiological event, measured by some instrument, occurred in his or her body. Such a verbal response could correctly be termed a tact of the event as measured by the instrument. A subject trained in this way may come to respond differentially to the occurrence, intensity, etc. of the measured event. In fact, as Zuriff (1979) has suggested, a person trained in this way may be found to be, for example, anxious without being aware of it, or, alternatively, may be considered 'defective' in reporting on such events.

However, that such training is *possible* need not lead the radical behaviourist to conclude that private stimuli exist in the usual situation where no training or measurement has occurred. Such a conclusion is yielding, perhaps, to the temptation mentioned by Day (1969a) -and already quoted in Section 2.2.3- of reifying the concept of conditioning. Only a reified view of operant conditioning as an absolute, existent process could explain why it would seem that first-person reports must, in part, be responses to private stimuli. And Skinner (1957), it would seem, is one who feels certain that such must be the case. He insists, "[t]here is no question that responses to private stimuli are established." (p. 131. Brackets added).

But, in fact, it is quite possible to question whether such relationships are established. If the term 'private stimulus' is itself being used as a tact -thus ranking as a scientific observation according to Hayes and Brownstein (1987)- then its controlling stimulus must be public and observable. (Of course, if the utterance "private stimuli" is found not to be a tact there would be no need to look for the object or event in the presence of which it is evoked.)

So if the term 'private stimuli' is a tact then the controlling stimulus for its emission cannot be either an actual private stimulus or the stimulus-response relationship between first-person reports and their supposed private stimuli. If it *were* possible to tact stimulus-response relationships or private stimuli then first-person reports could themselves be established as tacts. But Skinner began by assuming that there are stimuli which a listener is not in the position to reinforce in the manner characteristic of the tact. Hence the original problem.

Exactly what feature of the environment might be controlling the emission of 'private stimuli' as a tact is not vital to this discussion. Most likely it

would be some feature(s) that circumstances surrounding first-person reports share with other circumstances where stimulus-response relationships have been found. That is, situations where stimulus-response relationships have been actually observed ('tacted') by the behaviourist. Whatever, the behaviourist should be aware that the utterance "private stimuli" cannot be a tact of a private stimulus or of a stimulus-response relationship and so should be wary of how first-person reports are to be treated.

There is an aspect of first-person reports that makes a full acceptance of the approach of radical behaviourism unwise. It has been mentioned that the verbal community cannot reinforce first-person reports contingent on a particular internal event. Yet a behavioural analysis must seek to discover a particular private stimulus controlling a first-person report in order to facilitate prediction and control. But, ultimately, 'discovering' a particular private stimulus is indistinguishable from establishing a particular controlling relationship. This follows from the fact that radical behaviourist causality (See Section 2.2.3, above) is based on contingency-determined differential survival of behaviours and not on a mechanistic principle. Nothing is contingent on a first-person report being a *response* to a particular internal event. Until, of course, reinforcement *does* become contingent on a particular event.

Now, Skinner's comment that there is no question that responses to private stimuli are established seems to imply that some knowledge can be had of the nature of the world prior to carrying out a behavioural analysis. This implied knowledge is seen by Flanagan (1980) as reflecting ontological and metaphysical commitments. In particular, commitments to a material and lawful (causal) world. Yet a radical behaviouristic conception of knowledge (See Section 2.2.2) only allows for contingency-governed and rule-governed knowledge.

Knowledge of private stimuli cannot be contingency-governed since private stimuli for Skinner are just those stimuli a listener cannot behave with respect to. And rule-governed knowledge only involves being able to state contingency-specifying rules pertaining to a certain situation. Since Skinner's (1957) comment does not specify any contingencies then, according to the radical behaviourist understanding of knowledge, it does not represent an example of knowledge.

It would not be unfair to see the comment that "there is no question that responses to private stimuli are established " as being analogous to a comment such as "there is no question that God exists." Neither comment involves knowledge because of the role the concepts 'private stimuli' and 'God' are asked to fulfil elsewhere. Just as 'God' is beyond human comprehension, so too 'private stimuli' are events beyond any possible contingent relationship that can be established with the behaviour of a listener. And in analysing first-person reports the behaviourist is a listener.

The preceding argument reduces to the point that the terms 'private' and 'stimuli' are not really compatible in a behavioural treatment. Skinner (1953) understood as much when he stated;

Our survey of the ways in which a community may impart a subjective vocabulary did not reveal any means of setting up a discriminative response to *privacy as such* . A world of experience which is by definition available only to the individual, wholly without public accompaniment, could never become the discriminative occasion for self-description. (p. 280).

However, it is argued here that Skinner *does* try to say something about the existence of private stimuli *prior to* the isolation of stimuli controlling first-person reports of private events. As mentioned in the previous section, the behavioural scientist treats private stimuli as "inferences." (Skinner, 1953, p. 282). The inference is achieved (and makes sense) only if a physicalist or materialist metaphysics is adopted.

The argument can be reiterated and summarized in the following way.

- (1) For observation reports to be scientific they must, in part, be composed of tacts.
- (2) Tacts are established through the reinforcement contingencies of a verbal community.
- (3) Prior to the establishment of a controlling relation between a 'private' stimulus and a verbal response there is no sense to the notion that stimuli or stimulus-

response relationships exist. That is, the claim that there are as yet undiscovered private stimuli controlling first-person reports of private events should not be seen as implying knowledge.

(4) In order to make sense of (or justify) attempts to 'discover' controlling stimuli for first-person reports, radical behaviourism adopts a metaphysics. This metaphysics takes as axiomatic the theses that behaviour is *material* and, most importantly, *lawful* (Flanagan, 1980, discussed this "Skinnerian Metaphysics").

(5) The behavioural scientist infers the existence of private stimuli controlling first-person reports of private events through adopting the metaphysics in (4) (Zuriff, 1979, described how first-person reports can be treated inferentially).

Some interesting points can be made with regards to this summary. Firstly, Skinner (1974) noted that;

Plato is said to have discovered the mind, but it would be more accurate to say that he invented one version of it. (p. 31).

Similarly, it could be said that a behavioural analysis does not so much discover private stimuli as invent them. It is possible that Skinner would not object to such a comment. Instead, the behaviour of 'inventing' private stimuli is likely to be defended in terms of the radical behaviourist's conception of values. In particular, with regards to the 'value' of survival. That is, it could be argued that inventing private stimuli facilitates survival. The next section, therefore, includes discussion of values in analysing the treatment of reflexivity by radical behaviourism.

Secondly, Skinner's (1957) list of the four ways in which a verbal community might establish the "contingencies of reinforcement which produce verbal responses to private stimuli" (p. 131) can be reinterpreted. The four ways are:

(1) Reinforce public accompaniments of private stimuli -(e.g.) reinforce the response "That hurts!" when someone has been hit;

(2) Reinforce in the presence of collateral responses to the private stimuli -(e.g.) reinforce the response "My tooth aches" when the person is also holding his or her jaw;

(3) Reinforce a response to a public stimulus "only to have the response transferred to a private event by virtue of common properties, as in metaphorical and metonymical extension";

(4) Reinforce responses self-descriptive of the speaker's behaviour followed by a reduction in the magnitude of this behaviour so that a response is "eventually made to a private stimulus which is similar except in magnitude to private stimuli otherwise accompanied by public manifestations".

(pp. 132-133).

In each of these four ways the epistemological mission of the inferred 'private stimulus' is revealed. It is suggested here that the term 'private stimulus' is a paradox and functions as an attempt to claim that an epistemological gap has been bridged that, in fact, cannot be bridged. The implied claim is that first-person reports of private events provide knowledge of the presence of yet to be analysed private, physical stimuli. And, in turn, this knowledge justifies talk of public "accompaniments" and "collateral responses."

In other words, for Skinner, private events are not private events at all. They are public events pictured as being 'hidden' beneath the skin. The difference here is not trivial. If private events are only hidden public events then discovering their role as stimuli by means of a behavioural analysis seems not only sensible but obligatory. That is, such a picture of private events seems to 'suggest' the best way to deal with private events.

However, if it is true that there is no sense to talk of having any knowledge at all of private events then there need be no sense of obligation in treating them according to the approach of radical behaviourism. Also, if true, this suggests that radical behaviourism may not have completely freed itself from the problems of reflexivity outlined in the Introduction. Radical behaviourism may, therefore, be susceptible to the charge of being an "ideological philosophy" in the pejorative sense in which the term is used by Bartlett (1986; See Section 2.1, above).

Of course, an alternative to the approach of radical behaviourism has been to treat first-person reports of private events as reports about *mental* objects and events. This contrasts with Skinner's (1953, p. 282; 1984b, p. 618) belief that first-person reports are best treated, inferentially, as reports of internal *physical* objects and events.

However, there is at least one other possibility. First-person reports need not be treated as reports of anything specifiable *at all*. That is, in traditional terms a referent of first-person utterances need not be sought, or, in Skinner's terms, no internal controlling stimuli need be discovered. There is no need to think of first-person utterances as responses that are lawfully related to specifiable internal events.

An example of this alternative view is to understand first-person reports simply as *discriminative stimuli* controlling the behavioural responses of others or of the individual making the report. Rather than treating first-person reports as *responses* to stimuli they could instead, and just as validly, be thought of as part of the 'natural expression' of particular phenomena. The main advantage of this viewpoint is that it avoids having to explain how responses to private stimuli could possibly be established by the reinforcing practices of a verbal community.

As already mentioned (Section 2.3), in practice functional stimuli and responses are often specified purely in the language of physics (Zuriff, 1985, pp. 48-49). This practice is to enable an experimental analysis of behaviour to be performed. For example, in the operant chamber, the bar has to be specified independently of the bar-pressing response otherwise an infinite regress would occur in any attempt to record the occurrence of either the bar or the bar-press.

That this practice is only a strategic, methodological move, and thus in a sense arbitrary, finally becomes philosophically important when dealing with first-person reports of private events. Since a stimulus is often specified in physical terms it is very tempting for the behaviourist to see first-person reports as responses to internal physical stimuli. But, tempting as this conclusion may be, it ignores, at the risk of philosophical inconsistency and incoherence, the fact that a private physical event can never be a stimulus in a functional analysis. In the example of bar-pressing the 'bar' can easily move between its roles as physical object and functional stimulus class, without serious objections being raised. However, just because events 'within the skin' are physical -and that is not being denied- it does not follow that they therefore act as stimuli (or responses) in the sense used in operant psychology.

In the world of public events a behaviourist can be said to actually see contingent relationships between events (Day, 1969b, p. 505). However, by definition no such relationship involving private events could be 'seen'. (Although such a relationship could be 'imagined', perhaps. But 'imagining' is a very different concept from that of 'seeing'.) What *can* be observed are relationships between first-person reports and subsequent behaviours both by the individuals making the reports and others. But, since in the latter scheme first-person reports are treated as stimuli rather than responses, there is no suggestion as to how to behaviourally control the occurrence of such reports.

In other words, the term 'private stimuli' simply denotes the point at which structure and function become indistinguishable. To say a first-person report can be considered as part of a unitary 'natural' phenomenon is to see the situation structurally. Whereas, to say a first-person report is a response to private stimuli amounts to dissecting the phenomenon and thus to see it functionally.

The point being made here is that there is nothing to suggest which interpretation is best or more appropriate. In more pragmatic tone, the division between structure and function is of no use here. And the division between structure and function is nothing more than yet another manifestation of the two types of meaning that have been mentioned in previous Chapters. That is, meaning as instantaneous, 'grasped in a flash' (structural), and meaning as 'use over time' (functional).

One possible solution would be to treat first-person reports as responses to some sort of 'global' stimulus composed of all events occurring both immediately and distally prior to the report. Obviously, specifying and measuring such a stimulus would be impossible in practical terms and perhaps even impossible in logical terms. It would certainly be more convenient for first-person reports to be responses controlled by punctate, clearly specified private stimuli. While daunting, the technological task of identifying such stimuli would not be impossible. But, if calling a first-person report a response to a private stimulus is akin to calling the silhouette of a particular building a response to concrete and steel arranged in a certain way, then it can be seen that seeing first-person reports as either responses or stimuli is relative to the observer.

It is probably worth making this point in another way. Skinner (1953) claimed that;

"I was on the point of going home" may be regarded as the equivalent of "I observed events in myself which characteristically precede or accompany my going home." (p. 262).

But, this suggested equivalence is misleading. As has often been pointed out ((e.g.) Falk, 1987) certain, and perhaps the most frequent, uses of the personal pronoun 'I' do not stand substitution by terms like 'someone' or even 'the utterer of this utterance.' It is suggested here that the former of the two statements mentioned by Skinner *could* stand such substitution. That is, it is possible to imagine someone in normal conversation saying 'Someone was on the point of going home' and meaning himself or herself. (In a similar way people sometimes say 'Someone is getting angry as a warning to a listener that they are getting angry).

However, the second of Skinner's two statements could not stand such substitution. The statement "Someone observed events in myself..." could only occur, outside of 'idle' philosophizing, when, for example, someone was recounting what happened when she or he had surgery -or perhaps by someone who believed other people had the power of x-ray vision. In these cases "I" could substitute for "someone" ((e.g.) a person might observe events in his or her body during surgery using a local anaesthetic). But in the usual case where there is no surgery or x-ray vision it would be a

mistake to substitute "I" for "someone." By calling the two utterances ("I was on the point of going home" and "I observed events in myself...") *equivalent*, Skinner has made the latter, mistaken, substitution seem like a valid possibility. That is, given that the substitution is valid in the first utterance ("I was on the point of going home"), *and* given the two utterances can be treated as equivalent, Skinner has concluded that it must be possible to make the substitution in the second utterance.

Zuriff (1979) examined the 'logic' of first-person reports and arrived at much the same conclusion. He argued that a first-person report should not be understood as a data report. That is, an utterance such as "I have a toothache" is not a report of a scientific datum which just happens to be inside the speaker's body. So a scientific report would not include the datum "a toothache occurred." Instead, Zuriff (1979) suggested that the datum to be recorded should be "the subject reported a toothache occurred." (p. 131). The subject thus becomes an instrument "to discover the nature of private events " (p. 131). And it is for the scientist to determine how to interpret the 'readings' of this instrument. Most importantly, Zuriff (1979) clearly stated that the scientist thus "hypothesizes," "postulates" and "infers" concerning covert stimuli and responses. Only by hypothesis can private events be said to exert stimulus control. Neither the behaviourist nor the subject *observes* this relationship between private events and first-person reports.

In summary, the present section has attempted to show, using several different approaches, that first-person reports of private events are best not regarded as facts. One problem that remains is just how the reinforcing practices of a verbal community could establish a first-person report as a fact of a private event. It has been suggested that the only way that radical behaviourism could avoid this problem would be to either make ontological and metaphysical claims about private events and their relationship to first-person reports (See Flanagan, 1980), or to treat comments about such relationships as hypotheses and inferences (See Zuriff, 1979).

The following section draws some conclusions regarding radical behaviourism's treatment of the issues of reflexivity.

2.5 CONCLUSION: RADICAL BEHAVIOURISM AND ISSUES OF REFLEXIVITY

2.5.1 INTRODUCTION

In Chapter One three issues of reflexivity were listed. They were termed 'reflexive' issues because they shared a recursive, self-referential aspect. These three issues are:

- (1) The usefulness of conceiving of people as reflexive, active agents;
- (2) The ability of a psychological explanation to provide a coherent account of its own production;
- (3) The possibility of evaluating a psychological theory or approach independently of its own particular assumptions.

How radical behaviourism fares with each of these three issues will now be discussed in the light of the account of radical behaviourism presented in preceding sections.

2.5.2 RADICAL BEHAVIOURISM AND THE AGENT

It is clear that for Skinner a behavioural analysis does not need to create room for an active agent. Furthermore, much of the book *Beyond Freedom and Dignity* (Skinner, 1971a) can be read as a warning about the unfortunate consequences of holding to the doctrine of autonomous man. "A person is not an originating agent", claimed Skinner (1974), " he is a locus, a point at which many genetic and environmental conditions come together in a joint effect." (p. 168). Failure to realize this could result in the "abolition of the human species." (Skinner, 1971a, p. 196).

Most importantly, for the behaviourist, there is no advantage to be gained by incorporating an active agent as a theoretical construct into a causal

explanation of behaviour. Zuriff (1985) concisely commented in this regard that;

Lawfulness, objectivity, observability, and scientific explanation, the hallmarks of behaviorist science, as well as prediction and control, the goals of that science, can be achieved only if, as a working assumption, agency is abandoned. (p. 178).

Behaviourist explanation, analogous as it is to 'Darwinian' explanation in evolutionary biology (See Section 2.2.4, above), seeks to explain why one behaviour occurs rather than another. But, more than this, such explanation must also make possible prediction and control. This is only achieved once an external, environmental cause has been given. Agentic 'powers,' 'capacities,' 'beliefs' and 'desires' can only ever be inaccurate estimations of the environmental variables and contingencies responsible for particular behaviours, according to the behaviourist.

An important consequence of the behaviourist approach is that the knowledge a person has is not construed as a collection of beliefs. Instead, knowledge is viewed as a repertoire of behavioural responses (See Section 2.2.2, above). Therefore, aspects of behaviour which might traditionally be viewed as reflexive, such as self-knowledge and awareness, are analysed in terms of the reinforcement contingencies of the verbal community (Skinner, 1974, pp. 168-171).

On first inspection, then, radical behaviourism appears to avoid any problems that might arise from the inclusion of a reflexive agent in a causal explanation of behaviour. However, in Skinner's approach to private events there are hints that a reflexive aspect might return (Skinner, 1957, p. 130ff; 1974, p. 17; 1984, pp. 617-618). Reflexivity returns in the limited yet still possible personal knowledge of private events. Skinner (1984b) asked; "What *are* the private events which, at least in a limited way, a man may come to respond to in ways we call knowing?" (p. 618). As was discussed in Sections 2.3 and 2.4, above, there are problems in accounting for any knowledge *at all* that individuals may be said to have of their own private, internal events. It is not that discriminations of internal events cannot be taught 'as effectively as' discriminations of public stimuli, it is that they cannot be taught *at all*.

It is suggested here that this problem arises because the kind of knowledge Skinner implies it is possible for an individual to have is essentially *reflexive* knowledge. That is, knowledge of such a personal nature that it depends on discriminations which *cannot have been taught by the verbal community* . It was suggested in Section 2.4 that this kind of implied knowledge serves as a justification for treating first-person reports as responses to private stimuli.

So, at least at the philosophical level, radical behaviourism, as espoused by Skinner, readmits a reflexive aspect into the study of human behaviour. This, despite Skinner's many comments that try to connect personal knowledge of internal events to the reinforcing practices of a verbal community ((e.g.) "Self-knowledge is of social origin, and it is useful first to the community which asks the questions" (Skinner, 1974, p. 169).

In practice this reflexive aspect can be ignored by viewing first-person reports as *unreliable* reports of internal events. But the problems of reflexivity are not thereby dissolved. An individual who can respond discriminatively to internal events that have not been differentiated in the reinforcement contingencies of the verbal community must be making discriminations in some as yet unexplained way. Therefore, an element of unpredictability in her or his behaviour must remain at least as far as the verbal community is concerned.

The alternative is to treat private events as inferences, made by the scientist, from first-person reports (Zuriff, 1979). But this may simply move the problems of reflexivity to a different level. In particular, difficulties may re-emerge in the evaluation of different philosophies of science.

2.5.3 RADICAL BEHAVIOURISM AND REFLEXIVE FEATURES OF PSYCHOLOGICAL EXPLANATIONS

Can behavioural analysis successfully explain its own occurrence in the verbal behaviour of certain humans without being self-refuting or confused? The short answer seems to be 'yes', but with a caveat.

Central to a behaviourist account of how behavioural analysis could have arisen as a natural activity is the radical behaviourist epistemology discussed above (See Section 2.2.2). In this epistemology, according to Lee (1985b), there is *knowledge* which consists of 'rules' (statements describing

contingencies), and there is *knowing*, which consists of effective behaviour. This distinction is found in science. As Lee (1985b) stated;

The scientist as experimenter participates in investigative contingencies. As theoretician, the scientist formulates rules that describe the investigative contingencies. (pp. 189-190).

A "rule" is "above all else" a discriminative stimulus and discriminative stimuli are "objects or events that occasion effective behaviour." (p. 184). Therefore, behavioural analysis exists because the laws it produces act as discriminative stimuli that lead to "effective" behaviour in a particular situation. Behavioural laws result in effective behaviour because they are concerned with the *consequences* of an action above all other considerations. The challenge can be made that the 'effectiveness' of a particular behaviour can only be assessed by further behaviour, which in turn must be assessed for its own 'effectiveness' with further behaviour, *ad infinitum*. Finally determining the 'effectiveness' of a behaviour thus seems like an inevitably elusive goal.

But Zuriff (1980) explained how such an infinite regress can be avoided in a radical behaviourist epistemology. Zuriff (1980) claimed that Skinner's radical behaviourism has a "Theory of Truth" that does not depend on correspondence, intersubjective agreement, or incorrigibility. Instead, radical behaviourism employs a *pragmatic* theory of truth housed in a *naturalized* epistemology. The 'pragmatic' label refers to the criterion of 'effectiveness.' Verbal behaviour is true if it produces effective behaviour. The important feature, however, is the naturalized epistemology. Simply put, biological and cultural evolution has produced humans who accept certain verbal behaviour as true without using any explicit truth criteria.

In time a science of behaviour emerges and produces 'effectiveness' as an explicit criterion of truth. This science also provides methods specifying how effectiveness is to be defined and measured. Finally, the criterion and methods "are accepted... mostly because humans simply find them acceptable." (Zuriff, 1980, p. 348). No choice is involved in accepting the criterion and methods. And, presumably, the methods just do come to constitute the criterion. Thus, no infinite regress is initiated by attempting to determine the 'effectiveness' of the methods and criterion. After all, the

methods and criterion come to count as just what is meant by 'effectiveness.'

This then is a naturalistic explanation of how humans come to know certain verbal behaviour as being true. In this sense, as Zuriff (1980) argued, the acceptance of 'effectiveness' as a criterion of truth is a *prediction* rather than a *recommendation* of a science of behaviour. It is predicted that individuals and verbal communities will establish 'effectiveness' as a criterion of truth. In its barest and boldest form the prediction, derived from a behavioural analysis, is that verbal communities that are guided by behavioural analyses of events will out-survive all other competitors (See Section 2.5.4, below).

It appears then that radical behaviourism is not self-refuting or contradictory. The fact that a science of behaviour produces both a criterion for truth as well as the means of defining and measuring the criterion does not, of course, make such a science self-refuting. As discussed at the beginning of this Chapter, "global theories" have just this form and it can be argued that this form is desirable rather than offensive (Hooker, 1975). Nevertheless, the following section discusses how such all-encompassing approaches are to be evaluated, which is the concern expressed above as the third issue of reflexivity.

Serving as an introduction to the following section a caveat must be added to the present conclusion, however. If a science of behaviour *predicts* 'effectiveness' being accepted as a criterion of truth then it should be informative to examine how radical behaviourism understands the status of *predictions* made by a science of behaviour.

Zuriff (1980) did not state exactly what methods and means of measurement a science of behaviour specifies to determine the effectiveness of a particular example of verbal behaviour. But presumably the most important feature determining effectiveness would be the extent to which the verbal behaviour is reinforced. And, since Skinner (1984c, p. 704) said "I know of no way in which a reinforcer can be identified in advance", effective behaviour would simply be behaviour that continues to occur.

Here, effectiveness is similar to *fitness* in evolutionary biology. Central to evolutionary biology is the insight that fitness is measured by survival and not *vice versa*. In a particular instance biologists may state that an organism's survival is caused by some particular adaptation. But the

adaptation does not therefore constitute fitness. The adaptation does not survive because it is 'fit'. Rather, its survival is dependent on the complex of selection pressures present at the time. In this sense there can be no 'theory' of what underlies or causes fitness. Survival is simply a measurement that, at any particular time, biologists use as an indication of fitness. Even specifying definitions and methods of measuring fitness cannot be said to *constitute* fitness since no specified rule can also specify how it is to be used (See Hofstadter, 1979 and Wittgenstein, 1953, (e.g.) P.I. 84-86 for two discussions of why following a rule is not as simple to explain as it is easy to perform). It is by this means that evolutionary biology dispenses with design, and a designing agent, in its explanation of the variety of life forms. Fitness is not so much an explanation of survival but rather an invitation to describe what is observed or measured as surviving.

Analogously, at the most fundamental level, there can be no 'theory' of what causes effectiveness. In any particular instance a behaviour may be judged to be effective. A theory could then be proposed to explain why that behaviour is effective. For example, it may be effective because it corresponds to the nature of the world. But, if it is the behaviour of 'judging-behaviour-as-effective' that is to be explained rather than effectiveness itself, then nothing is gained by having a theory of effectiveness. This is because an explanation of how a theory could cause a person to behave one way ((e.g.) judging a behaviour as effective) or another ((e.g.) judging a behaviour as not effective) would still be needed.

Now, if an explicit theory of effectiveness is unimportant in a causal explanation of 'judging-behaviour-as-effective', then the question of what characteristics a behaviour must possess to be effective remains open-ended. Finally, then, the prediction that effectiveness will arise as a criterion of truth, ironically, does not predict what particular forms of behaviour might survive. In simple terms the functional behaviour class of 'seeing the effectiveness of verbal behaviour' may take on any number of imaginable forms. The prediction predicts nothing specific.

In fact, given a radical behaviourist epistemology and Zuriff's (1980) pragmatic theory of truth, no prediction need be thought of as predicting anything in particular. Just as first-person reports of private events provide knowledge of, or point to, 'no-thing' in the private world, so too predictions point to, or provide knowledge of, 'no-thing' in the future. Of course, this

does not mean that predictions are therefore unjustified or worthless. Rather, it is just one more reason for seeking a new understanding of the status of knowledge and meaning, particularly knowledge and meaning as related to psychological phenomena. Chapter 3 begins that search.

2.5.4 RADICAL BEHAVIOURISM, REFLEXIVITY AND THE EVALUATION OF PSYCHOLOGICAL EXPLANATIONS

Just as radical behaviourism gives a naturalistic account of epistemology, which leads to the prediction of effectiveness emerging as a criterion of truth, so too it provides a naturalistic account of ethics and values.

In simple terms, 'evaluating' something involves assessing its worth in some way. This section will discuss how radical behaviourism assesses psychological explanations and approaches, including itself, in the light of reflexive aspects of the process of evaluation.

The first point to be made is that the explicit criteria of prediction and control that are said, by both behaviourists and non-behaviourists, to characterize a behaviourist explanation of human behaviour are not the ultimate source of radical behaviourist evaluations. If prediction and control were arbitrary standards accepted unquestioningly then it would be possible to argue that there are other, equally valid, criteria to use in evaluating psychological explanations. Examples of such criteria are 'explanatory power', 'systemic worth' and 'fruitfulness'. But, for Skinner, prediction and control are not arbitrary in the sense of being on a par with other criteria. Instead the two criteria are unique in the direct way they relate to the only value that eventually matters (Skinner, 1953, p. 430ff; 1971a, p. 126). That value is *survival*.

In operant terms survival is the ultimate consequence by which all behaviour is to be judged. The worth of a psychological explanation, therefore, is not dependent on any intellectual properties it may possess. Unless, of course, the intellectual properties can be translated into behaviours that contribute to survival. In keeping with the radical behaviourist outlook this could be thought of as involving the survival of one idea in competition with other ideas (c.f. Dawkins', 1978, discussion of the "meme"). Survival of behaviourist explanation involves the survival of *cultural practices*.

This type of survival operates through a certain kind of selection. Just as natural selection operates on genes and reinforcement operates selectively on behaviour, so too competition between social groups and interactions between social groups and the non-social environment select cultural practices. As Skinner (1953) commented;

Cultural practices which are advantageous will tend to be characteristic of the groups which survive and which therefore perpetuate those practices. Some cultural practices may therefore be said to have survival value, while others are lethal in the genetic sense. (p. 430).

While conceding that survival value is "not an unchanging criterion, for what may be a 'good' culture in one period is not necessarily 'good' in another" (p. 431) Skinner (1953) concluded that;

In the long run, however, the most effective control from the point of view of survival will probably be based upon the most reliable estimates of the survival value of cultural practices. Since a science of behaviour is concerned with demonstrating the consequences of cultural practices, we have some reason for believing that such a science will be an essential mark of the culture or cultures which survive. The current culture which, on this score alone, is most likely to survive is therefore, that in which the methods of science are most effectively applied to the problems of human behavior. (p. 446).

Skinner's conclusion (or prediction) is that the most effective means of ensuring the survival of a culture involves a deliberate analysis of the functional relationships between cultural practices and their consequences. Behavioural analysis, of course, is just such a deliberate analysis.

So the ultimate value of behaviourist explanation is that, according to Skinner's prediction, it is comprised of cultural practices -such as assessing the consequences of cultural practices- that aid in the survival of a culture. In turn, the survival of the culture results in the survival of those practices.

Thus, just as epistemology is 'naturalized' by radical behaviourism, so too, values and the process of evaluation are naturalized.

It may appear that such naturalized evaluation avoids the reflexive question of how behaviourist explanation can be evaluated independently of behaviourist assumptions. Since it is a *prediction* that the value of survival will become adopted as a prior condition for cultural design, then it may seem that the correctness of this prediction will be decided empirically. This may be so, but as has just been argued (Section 2.5.3) the status of predictions in radical behaviourism leads to some interesting conclusions. The behaviours involved in prediction are themselves cultural practices. Skinner believes it reasonable to consider that the practice of 'deliberately' and explicitly assessing the survival value of cultural practices must *itself* have survival value. But, strictly speaking, from a radical behaviourist view of knowledge, explanation and causality there is no 'must' here at all. Knowledge, for the behaviourist is never of the nature of the world (See Section 2.2.2). Therefore, knowledge of survival value can never be descriptive of the nature of a certain cultural practice.

If the cultural practice of "assessing the survival value of cultural practices" itself survives it will not be because of any quality such a practice possesses, according to radical behaviourism. This is because such an explanation would be an explanation in terms of causal mechanisms, and radical behaviourism eschews explanations that speak of causal mechanisms. If a behaviour analytic explanation of why a behaviour or cultural practice survives is requested, then it will be given in terms of the reinforcement histories of those individuals who respond to the behaviour or practice in ways called "seeing that it survives." Certainly, physiological, chemical, physical or logical explanations could also be given but they are the tasks of physiologists, chemists, physicists and logicians, and not of psychologists.

So, what of Skinner's prediction that the culture that most effectively applies the methods of science to the area of behaviour is most likely to survive? Ultimately, from the radical behaviourist perspective, this prediction is a manifestation, or example, of the continuing survival of the practice of behavioural analysis. That is, it would be contrary to the spirit of radical behaviourism to respond to the prediction as if it were some form of description of future events -a description founded on the presumed causal or, perhaps, logical structure of the world. However, this does not make

predictions weak or worthless. Instead, radical behaviourism simply presents a distinctive account of how predictions predict.

Traditionally a prediction may have been thought of as a probe into the future that relied for its justification on the secure inevitability that underpins a mechanistic account of causality. But the image of such absolute security is lost in radical behaviourism. Therefore, a prediction becomes, first and foremost, a behaviour to be analysed as any other. It may act as a discriminative stimulus controlling responses but this is not a unique feature of predictions. In the last analysis, predictions are predictions because they are responded to as predictions. And, applying the "methods of science ... to the problems of human behaviour" is predicted as aiding in the survival of a culture ultimately because individuals 'see' that the methods of science when applied to the problems of human behaviour aid in the survival of a culture.

Such apparently anticlimactic conclusions, it is suggested here, are at the heart of radical behaviourism. Depending on the viewpoint taken they can be seen as the most trivial or most profound insights radical behaviourism has to offer. 'Trivial' to the extent that these conclusions do not seem to explain what, for example, prediction actually *is* in substantive terms. 'Profound' to the extent that these sorts of conclusions can seem to dispense with the need to ask such questions in the first place.

This, then, is the radical behaviourist approach to evaluation. At bedrock there is no reflexive problem in evaluating a form of psychological explanation because there is no internal process of evaluation occurring. An evaluation only happens in the sense that one or another response occurs. But of course, in order to realize that there is no reflexive problem a radical behaviourist posture must first be taken.

It would be easy at this point to conclude that there are two completely incommensurable world-views in operation. One world-view terminates in seemingly endless agonizing over what have here been called the issues of reflexivity. Meanwhile, the other world-view -radical behaviourism-terminates in a scientific version of Calvinist predestination. That is, even the process of evaluation is interpreted as being caused by 'external' factors. And, of course, it is simply unfortunate, for either the individual or the culture, if the 'response', in this case the approach taken to psychological

phenomena, does not have survival value. This view was clearly stated by Skinner (1971b);

Those who are induced by their culture to act in its service will do so, and the culture will benefit. They will not do so because of any certain knowledge in advance of where the culture is going. Those who want to know now what will be right in the future miss the whole point of evolution. ... There is no way in which one can predict later stages in an evolutionary history. It is not in the nature of evolution that this should be possible. (pp. 550-551).

Since it is so difficult, even impossible, to know what will be right in the future then the problem of evaluating different approaches to "the problems of human behaviour" will not be solved by an evaluation. Only the evolutionary process finally 'solves' the problem as it works to select a certain approach.

However, the incommensurability of these two 'world-views' will not be taken as the final conclusion here. Within radical behaviourism the issues of reflexivity are, to varying degrees, treated coherently and consistently. However, when it comes to discussing and evaluating approaches to psychological phenomena it is not considered satisfactory to end such discussion by claiming that the final arbiter is a process essentially *external* to all discussion. But also, it is not considered satisfactory to claim that the final arbiter is essentially an *internal* process.

To seek an alternative to these two approaches is the purpose of the following Chapters.

CHAPTER THREE

3 WITTGENSTEIN'S EARLY PHILOSOPHY AND ISSUES OF REFLEXIVITY

3.1 INTRODUCTION

Ludwig Wittgenstein has often been accredited as one of the most important and influential philosophers of the twentieth century. Even Ayer (1985), while disagreeing with much of what Wittgenstein said, rated the philosophical influence of Wittgenstein in this century as second only to that of Bertrand Russell's.

Certainly Wittgenstein has been linked to, categorized with, and used to provide support for, many intellectual 'schools'. Logical positivism, structuralism, logical behaviourism, conventionalism, ordinary language philosophy, phenomenism, phenomenology, idealism, realism and mysticism have all been linked in one way or another to the philosophy of Wittgenstein.

From within psychology examples of a Wittgensteinian 'influence' include Day's (1969b) comparison of Skinner's operationism with Wittgenstein's *Philosophical Investigations* ; Coulter's (1983) 'rethink' of cognitive theory based on a 'Wittgensteinian' view; the claimed philosophical support Wittgenstein's 'Early' philosophy lends to paradoxical psychotherapy

(Watzlawick, Beavin and Jackson, 1967); and Ground's (1987) use of Wittgenstein's 'Late' philosophy to reconceptualize descriptive psychopathology.

What is surprising is that these various intellectual approaches when compared with each other often appear incompatible. In most cases this inconsistency can be explained in terms of two broad phases in Wittgenstein's philosophical career. Usually these two phases are called the 'Early' and 'Late' Wittgenstein. For example, the 'Early' philosophy was embraced by the logical positivists in the 'Vienna Circle' (Engelmann, 1967) while the 'Late' philosophy has been seen as influencing, if not initiating, linguistic philosophy and 'ordinary language philosophy'. (See Ayer, 1985, for a discussion of the influence of Wittgenstein's philosophy).

However, the extent to which the 'Early' and 'Late' philosophies represent a philosophical about-face has itself been questioned (Johnson, 1977; Finch, 1977). In particular, Finch (1971; 1977) has argued that the goals that Wittgenstein kept in view always remained the same even though the 'method' for achieving those goals underwent an apparently radical change. But this is not to say the 'method' or approach is secondary to the aims. More likely, the change in method reflects a completely altered view of the nature of the goals which, for example, included having a clear understanding of how language functions. Certainly, this likelihood seems to be confirmed in the first part of the *Philosophical Investigations* where Wittgenstein critiqued his own earlier understanding of how language functions.

Nevertheless, even within the 'Early' and 'Late' philosophies there are often apparently contradictory positions which could easily have given rise to contradictory intellectual approaches. For example, in the *Tractatus Logico-Philosophicus* Wittgenstein (1974a) relegated all propositions that are not those of the natural sciences -including 'propositions of logic' and all talk of ethics (T. 6.1, 6.11, 6.42) - to the realm of nonsense. And yet he seemed convinced of the importance of ethics and aesthetics and the "absolute value" of certain experiences despite the fact they cannot be talked about with sense (Wittgenstein, 1965, p. 6). Also, in the 'Late' philosophy there is the distinction between seeing the meaning of a word as its use in language (P.I. 43) and, alternatively, seeing the meaning of words, and phenomena in general, in their 'physiognomies' (P.I. p. 218).

More will be said about all of these topics subsequently. For the moment the simple point is being made that if Wittgenstein's philosophy in some sense can be said to span apparently antithetical intellectual approaches then it may be of interest to apply it to some of the apparently irreconcilable dichotomies and dilemmas in psychology that have been discussed in previous chapters.

Before outlining the philosophy of Wittgenstein as it relates to the topic of this thesis, some cautionary points should be made. It seems that Wittgenstein was not confident that his work would be understood by his contemporaries. For example, in the Foreword to the *Philosophical Investigations* Wittgenstein commented;

I make them [his 'remarks'] public with doubtful feelings. It is not impossible that it should fall to the lot of this work, in its poverty and in the darkness of this time, to bring light into one brain or another - but, of course, it is not likely. (p. x. Brackets added).

And, in the Preface to the *Philosophical Remarks* (Wittgenstein, 1975) spoke of the difference between the spirit in which the remarks had been written and the spirit that "instils much of Western society" suggesting that it is unlikely his work would be understood. That these comments are more than the expression of arrogance or preciousness is best supported by those who testified to his exacting and ruthless self-honesty ((e.g.) Engelmann, 1967).

It is *possible*, then, that a very different kind of attitude from that normally taken by philosophers, is required to understand what Wittgenstein has said. It is *possible* that Finch (1977) is correct in saying that Wittgenstein "... is the first philosopher who is really outside of modern philosophy - that is, outside the philosophy of the last three hundred years. In an exact way he is the first philosopher of our times who is not a Cartesian" (p. vii). It is *this* possibility in the work of Wittgenstein that should attract psychologists.

One final comment should be made before continuing. The following discussion is not intended to be what Begelman (1978) called "tombstone polishing." (p. 222). That is, the aim is not primarily to defend or even define what Wittgenstein meant in his philosophy. Debating precisely what Wittgenstein was saying presumably is an activity for philosophers.

Although, as Germana (1977) intimated, there is a curious sense in which assuming there is some ethereal 'essence' to Wittgenstein's philosophy is, potentially at least, extremely 'un-Wittgensteinian'. Instead, the following discussion presents a viewpoint that may or may not be consistent with what philosophers finally determine to be Wittgenstein's 'viewpoint', but which, nevertheless, is believed to help sort out issues of reflexivity as they affect psychology. In this sense the discussion below stands on its own and is not simply an appeal to the philosophical authority of Wittgenstein.

3.2 WITTGENSTEIN'S *TRACTATUS* AND REFLEXIVITY

The *Tractatus* can be seen as an attempt to construct a grand metaphysics about the nature of language and how it functions. But if this is so it would nevertheless be wrong to view the *Tractatus* simply as a 'theory' about language. In order to understand the intellectual importance and power of the *Tractatus* it is essential to understand the purpose for which it was written. Wittgenstein (1974a) stated his aim clearly in the Preface;

Thus the aim of this book is to draw a limit to thought, or rather to the expression of thoughts: for in order to be able to draw a limit to thought, we should have to find both sides of the limit thinkable (i.e. we should have to be able to think what cannot be thought).

It will therefore only be in language that the limit can be drawn, and what lies on the other side of the limit will simply be nonsense. (p. 3).

This passage shows that Wittgenstein was interested in limits. Drawing the boundaries between sense and nonsense, between what can and cannot be said and between what can be said and what can only be shown were the tasks the *Tractatus* was designed to achieve. Immediately it can be seen that these tasks were aimed at 'solving' the 'problem of reflexivity'. But in trying to explain the limits of language by using language Wittgenstein was face to face with the fact that "a theoretical treatment [of the limits of

language] demands an unworkably reflexive use of language." (Costall, 1980, p. 126. Brackets added) This remained a problem insofar as Wittgenstein had to conclude that his own statements on the form and structure of language were nonsensical. As he put it;

My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them - as steps - to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.). (T. 6.54).

All that is left is what cannot be said but can be "shown" or "meant" (T. 5.62). A residuum without substance that belongs to what Wittgenstein termed the "mystical" - the "things that cannot be put into words" (T. 6.522). It may in fact be that this journey into the 'mystical' is a result of trying to include the origins of a phenomenon in the phenomenon itself. In this respect it is interesting to note the similarities between the final conclusion of the *Tractatus* and the following remark by Davies (1981) on the possibility of explaining the origin of the universe;

Once again, I must stress that the big bang is not the appearance or expansion of a blob of matter into a pre-existing void, but the appearance of spacetime itself. Thus, questions about what 'caused' the big bang, or what 'happened before' it, *are meaningless*. We must face the fact that the big bang singularity is apparently naked and therefore in any case unpredictable. We might expect anything that came out of it to be completely random ... (p. 66. Emphasis added).

Of course, it is the distinction here between what can be 'said' and what can only be 'shown' or 'meant' that is relevant to *psychology* and the issues of reflexivity discussed in Chapter 1. For this distinction is very closely related to that between meaning as sheer reference and meaning as use over time. And, of course, the problematic nature of this latter distinction has been emphasized throughout previous Chapters. Right from the start of his philosophical career, then, Wittgenstein's interest was in the very problem that, it is suggested here, underlies many debates and dichotomies within

psychology. It is therefore worth examining, in some detail, what Wittgenstein (1974a) believed to be "on all essential points, the final solution of the problems" (p. 4).

The *Tractatus* presents a highly systematic analysis of these problems. But also, and more importantly, by taking these problems to the extreme it reveals quite clearly how they are produced by a particular, and widely held, view of language and the world.

However, it should be kept in mind throughout the following discussion that Wittgenstein himself came to reject this view as being too limited and recognized "grave mistakes" (Wittgenstein, 1953; p. x) in the *Tractatus*.

3.2.1 THE *TRACTATUS* AND THE NATURE OF LANGUAGE

The format of the *Tractatus* with its systematic and hierarchical decimal notation for each proposition visibly reflects the highly structural view of language as an exact calculus that it presents. (See Finch, 1971, for a discussion of the interesting structure of the *Tractatus*). It is no coincidence that it was while working with Bertrand Russell and Alfred North Whitehead at Cambridge before World War I that Wittgenstein focussed on this view of language. At the time (1911) Russell and Whitehead were concerned with the fundamental mathematical problems dealt with by the famous *Principia Mathematica* -an attempt to translate the foundations of mathematics into logic. In this attempt Russell, in particular, pursued "a kind of philosophical analysis that proceeds by the piecemeal decomposition of any complex subject into its logically ultimate components" (Barrett, 1978, p. 32).

This 'logical atomism' used by Russell merely as a procedure was, in the *Tractatus*, applied in an altered and extreme form to language itself. The following discussion describes the nature of 'logical atoms' and the structures they form in language as presented in the *Tractatus*.

3.2.1.1 Language as Picturing

Given that people can say and/or think things about the world then the world and language must have something in common (T. 2.16-2.182). And language must "correlate" (T. 2.15-2.1515) with reality. These two

requirements are the basis to understanding language as 'picturing' the world.

The pictorial view of language begins, for Wittgenstein, by seeing that "[a] picture is a model of reality." (T. 2.12. Brackets added). Then, if the requirement that language must correlate with reality is to be met, the determinate way in which the elements of a picture relate to one another "represents that things [in reality] are related to one another in the same way." (T. 2.15; Brackets added). The connection of the elements is the structure of the picture and, most importantly, the possibility of this structure is the pictorial form of the picture (T. 2.15). That is, the ability of a picture to be a picture must depend on the possibility that its structure shares the same structure as reality.

The relationship here between picture and reality is exceedingly intimate. In fact, so intimate that, "a picture, conceived in this way, also includes the pictorial relationship, which makes it into a picture." (T. 2.1513). Picture and reality remain separate but there is no gap between them. Thus, the "pictorial relationship" is inherent in the picture, for there is no other place for it. The picture "is laid against reality like a measure." (T. 2.1512). There is no intermediary between picture and reality -such an intermediary could only be another picture.

It is not at all difficult to see the parallels between this picturing view of language and representational views of perception and cognition in psychology ((e.g.) See Fodor (1981) on methodological solipsism, discussed in Chapter 1, Section 1.7.1, above). However, the parallels become even more interesting when the second requirement is examined.

If there are correlations between pictures and reality then, "There must be something identical in a picture and what it depicts, to enable the one to be a picture of the other at all." (T. 2.161). The form of a picture is what enables it to depict reality. Examples of forms are spatial, temporal and coloured forms. And, "[a] picture can depict any reality whose form it has." (T. 2.171. Brackets added). But one thing a picture cannot depict is its own pictorial form. Rather, it 'displays' its form (T. 2.172). One form that all pictures have is *logical form* (T. 2.182). In contrast, not all pictures have, for example, spatial form. So, logical form is what *any* picture must have to depict reality "- correctly or incorrectly -in any way at all ." (T. 2.18. Emphasis

added). It is 'logico-pictorial form' that pictures must have in common with what they picture (T. 2.2).

It must be seen that logical form is as much a *requirement* of pictures as a discovery about pictures. Because it is a requirement and not just a discovery then the limits of logic become the limits of the world. If, that is, by 'the world' is meant the "totality of facts, not of things" (T. 1), and if "A picture is a fact." (T. 2.141).

As already mentioned, one of the limits of picturing is that a picture cannot depict its own pictorial form (T. 2.172). This is related to the fact that in order for a picture to be correct or incorrect, it must represent "its subject from a position outside it [the subject]." (T. 2.173. Brackets added). In other words, the truth or falsity of a picture is determined by comparing it with the part of reality of which it is a picture.

The next step in Wittgenstein's (1974a) argument is stated in the following propositions;

What a picture represents it represents
independently of its truth or falsity, by means
of its pictorial form.

What a picture represents is its sense.

(T. 2.22, 2.221)

The 'sense' of a picture is represented *by means of* the pictorial form of the picture. The sense of a picture is represented -without intermediary- *by the picture*. This point is crucial in understanding how 'propositions' and 'propositional signs' differ from pictures. Significantly, -and of relevance to the psychologist- it is 'thoughts' that play the central role in this difference.

3.2.1.2 Thoughts, Propositions and Sense

From T. 3 to T. 3.13 Wittgenstein (1974a) describes the relationship between 'propositions', 'sense' and 'thoughts'. He begins by asserting that, "A logical picture of facts is a thought." (T. 3). And, if thoughts are pictures then "The totality of true thoughts is a picture of the world." (T. 3.01). In passing, it can be noted that thinking all true thoughts would still only produce a picture. This is analogous to the dilemma posed by the 'cognitive paradox' (Katz and Frost, 1979, discussed in Chapter 1, Section 1.7.1).

Thoughts play a central role in relating propositional signs to propositions and in distinguishing propositions from pictures. Wittgenstein (1974a) stated;

In a proposition a thought finds an expression that can be perceived by the senses.

We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation.

The method of projection is to think of the sense of the proposition .

I call the sign with which we express a thought a propositional sign. - And a proposition is a propositional sign in its projective relation to the world. (T. 3.1 -3.12. Emphasis added).

Propositional signs ((e.g.) spoken and written words) *express* thoughts, which are pictures of facts. But, on the one hand, pictures represent their sense 'directly', as it were, because the pictorial relationship -which "consists of the correlations of the picture's elements with things" (T. 2.1514)- *is included in the picture* . On the other hand, a propositional sign does *not* 'directly' relate to that of which it is a sign. Instead, it "projects" onto the world. And, revealing the absolute importance of thinking and thoughts, the method of projection is to think of the sense of a proposition.

It is no coincidence that the two aspects of thought mentioned here parallel the two aspects of meaning emphasized in previous Chapters. As pictures, thoughts have inherent sense. But propositional signs do not have inherent sense -they do not relate to the world in the same way as pictures- so thought must provide the sense. That is, something has to be done to a propositional sign to make it a proposition. So, in a picture 'sense' is instantaneous and inherent whereas in propositions 'sense' is the product of a process operating on the proposition over time.

Finch (1971, p. 57-58) makes the same point by noting the contrast between propositions T. 3 and T. 4 in the *Tractatus* . The former, as already mentioned, says "A logical picture of facts is a thought", and the latter states "A thought is a proposition with sense." Finch (1971) noted that there is a

contrast between the "passive" and the "active" in the roles the word 'thought' plays in these two propositions:

As a 'logical picture' a thought is 'passive' and does not assert anything. As a 'proposition with a sense,' on the other hand, it is 'active' and refers to the world to 'say' something. (p. 58).

And, also;

Another way of putting this might be to say that a picture has an intrinsic potential 'referentiality.' But it has no actual reference until we add in effect 'That is how what it is a picture of is.' The that has to be added to the how. A propositional sign, on the other hand, has to be thought of if it is to have any application at all. 'Thinking the sense of a proposition' gives a propositional sign its possible references. (p. 58).

The point is the same. A propositional sign only has a use when thought acts upon it. It has no intrinsic reference. Conversely, a picture 'refers' or relates to the world intrinsically without having to assert anything.

Following on from this view of propositions Wittgenstein (1974a) stated;

A proposition includes all that the projection includes, but not what is projected.

Therefore, though what is projected is not itself included, its possibility is.

A proposition, therefore, does not actually contain its sense, but does contain the possibility of expressing it.

('The content of a proposition' means the content of a proposition that has sense.)

A proposition contains the form, but not the content of its sense. (T. 3.13).

'Sense as content' here seems to be referring to some sort of private, qualitative experience of the sense of a proposition. As Finch (1971, p. 185) pointed out it is connected to Wittgenstein's idea of the 'experience' that is needed in order to understand logic. However, the latter 'experience' is not an experience (T. 5.552). That is, it is the 'experience' that something *is* ((i.e.) pure qualitative content) rather than the experience that something is *so*. It is not really an experience for the simple reason that it comes 'before' any experience that can actually be talked about. Language, including the language of metaphysics, cannot express this experience.

Despite this inexpressibility 'content' is not denied. It is part of what Wittgenstein (1974a) terms "substance." And;

Substance is what subsists independently of
what is the case.

It [substance] is form and content. (T. 2.024,
2.025. Brackets added).

As such, content is presupposed by language. It is a presupposition; it cannot itself be supposed. In this way content is neither real nor illusory simply because *nothing at all* can be said about it (Finch, 1971, p. 187).

In summary, the sense of a proposition when understood as content has to be thought in order to be projected onto the world. This is contrasted with pictures which "reach right out to" reality (T. 2.1511) via the "correlations of the picture's elements with things" (T. 2.1514). These correlations actually "touch" reality (T. 2.1515). This distinction between pictures and propositions finds its final -and perhaps most problematic- expression in thoughts. A thought can be either a "logical picture of facts" (T. 3), or a "proposition with a sense" (T. 4).

It is this view of thought with its dual nature that, in psychology, makes explanations of cognition vulnerable to the problems of reflexivity. As a 'thought picture,' an explanation of cognition, and the resulting behaviour, pictures the world with sense but "independently of its truth or falsity" (T. 2.22). As a proposition, however, an explanation must be thought (an activity over time) in order to have a sense. If thoughts are part of the natural, physical world -as they are assumed to be in psychology- then their presence in every explanation having sense brings physical causation into

the heart of rationality. The concepts of 'truth' and 'falsity' then lose their meaning.

The full impact of this dilemma becomes even clearer in the *Tractatus* when Wittgenstein turns his attention to the role and nature of logic and what, therefore, can be said about logic.

3.2.1.3 Logic

In the *Tractatus*, propositions are described as having elements that correspond to "the objects of thought" (T. 3.2). These elements, or "simple signs" (T. 3.201) are called "names" (T. 3.202). For Wittgenstein, "A name means an object" (T. 3.203) and, "In a proposition a name is the representative of an object" (T. 3.22).

Part of the 'atomism' of the *Tractatus* depends on the fact that objects can only be named -they cannot even be described. As Wittgenstein (1974a) stated;

Objects can only be *named*. Signs are their representatives. I can only speak *about* them: I cannot *put them into words*. Propositions can only say *how* things are, not *what* they are. (T. 3.221).

The impossibility of saying *what* things are can seem surprising since it may appear that propositions often speak of nothing else. But in a "completely analysed" proposition (T. 3.201) -one in which the "elements of the propositional sign correspond to the objects of thought" (T. 3.2)- names represent the bottom line of analysis. And this is why Wittgenstein (1974a) went on to say that a name "cannot be dissected any further by means of a definition: it is a primitive sign" (T. 3.26). Since objects can only be named (they can be neither defined nor described) then names must mean objects just by sheer reference. Therefore, what an object *is* can only be spoken of by saying how the object is in terms of other objects.

Much more could be said here about propositions that are concerned with material properties (See Finch, 1971, Chapter 2), matter and the search for the atom in physics. However, it is enough for the purposes of the present discussion to note that since objects can only be named, then everything that can be said must be in terms of structures of objects and not objects themselves.

Two vital points are related to the above. Firstly, the reason why names must be possible is linked in the *Tractatus* to the very possibility of propositions having sense: "The requirement that simple signs [names] be possible is the requirement that sense be determinate" (T. 3.23. Brackets added). That is, the reason why "simple signs" must be present in propositions is that without them the sense of a proposition would be indeterminate. And, in the context of turn-of-the-century philosophy, an indeterminate sense is not really a sense at all. (The realization that language did not have to be seen as having such a determinate structure was in part responsible for Wittgenstein's return to philosophy after a ten year hiatus.)

Secondly, this view of language implies that there is a limit to sense since the analysis of language is limited by 'names' and 'objects' serving as fundamental atoms. This outer limit of sense can be defined in terms of what Wittgenstein (1974a) called his "fundamental idea". He stated;

The possibility of propositions is based on the principle that objects have signs as their representatives.

My fundamental idea is that the 'logical constants' are not representatives; that there can be no representatives of the *logic* of facts. (T. 4.0312).

If the view of language as being composed of signs that represent objects is correct then the signs that appear to stand for logical relations and properties in fact do not stand for anything. This is all part of Wittgenstein's (1974) distinction between what *can be said* and what *can only be shown* (T. 4.1212). It is also part of what Wittgenstein saw as philosophy's function in setting limits to "the much disputed sphere of natural science" (T. 4.113) and to thought (T. 4.114 -via language. Also, Preface p. 3)

This view of language as 'limited' is central to the ideas in the *Tractatus* and is worth quoting at length;

Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it -logical form.

In order to be able to represent logical form,
we should have to be able to station ourselves
with propositions somewhere outside logic,
that is to say outside the world.

Propositions cannot represent logical form: it
is mirrored in them.

What finds its reflection in language,
language cannot represent.

What expresses itself in language, we cannot
express by means of language.

Propositions show the logical form of reality.

They display it. (T. 4.12, 4.121).

The limit which Wittgenstein is describing here is the very limit that seems to make reflexive issues so problematic. Given that objects and "states of affairs" (fixed structures of a world", Finch, 1971, p. 2) exist -and this *must* be given if exactness and determinacy of sense are to be possible- then even such things as properties and relations must be represented -if they are to be talked about with sense- as objects when propositions are "completely analyzed". Thus, "the differences between what is represented being a thing, or being a property or being a relation is conveyed entirely by syntax." (Finch, 1971, p. 4). Therefore, a true description of the underlying *a priori* logical form of language must forever be just out of reach and just out of the realm of sense (Much as the attempt to directly see oneself in profile in a mirror must remain an impossibility).

Yet, it may seem that logical form is the very essence of language and thought. That it is the one thing of which so much needs to be said. Logical form seen in this way resembles an ultimate structure determining what people can and cannot say and think.

So, to state that logical form can only be shown and can never be said is in a sense to undermine any rational (logical) attempt to explain language and thought. In fact, the rest of the *Tractatus* is a perfect example of this undermining process in action.

Before detailing this process, however, it is of interest to see how Wittgenstein's approach deals with the so-called logico-semantical paradoxes such as Russell's famous Liar Paradox.

3.2.2 SELF-REFERENTIAL SENTENCES AND PARADOX

Immediately after stating that, "What can be shown, cannot be said" (T. 4.1212), Wittgenstein (1974a) discussed "formal properties and relations" and "formal concepts." *Formal properties and relations* are also called "internal" in the case of facts to emphasize that, unlike "external" properties and relations, they can be 'manifested' in propositions but not 'asserted' as obtaining (T. 4.122). In other words, they can be 'shown' but not 'said'. Wittgenstein (1974a) explained this in another way by stating that, "A property [for example] is internal if it is unthinkable that its object should not possess it" (T. 4.123. Brackets added). So, internal properties of a fact (and internal relations of facts) are just those properties without which it would be impossible to think of the fact.

Similarly, *formal concepts* cannot be spoken of in isolation from the objects that fall under such concepts. That is, in contrast to concepts proper "Formal concepts cannot, in fact, be represented by means of a function" (T. 4.126). Instead, they are expressed by means of "propositional variables". That an object falls under a certain formal concept is shown in the very sign for the object and "this cannot be expressed by means of a proposition" (T. 4.126).

It seems that formal concepts are those whose 'form' underlies or stands in an *a priori* relationship to language. Thus, formal concepts and properties cannot rely on being said or stated in order to be recognized or understood. That is, they must *already be given* if they are to serve this formal role.

In respect of formal properties Wittgenstein (1974a) stated;

It is impossible to distinguish forms from one another by saying that one has this property and another that property: for this presupposes that it makes sense to ascribe either property to either form. (T. 4.1241).

(This 'presuppositional problem' is very reminiscent of the difficulty in representational approaches to perception of grounding the process of 'categorization' and recognition. See Chapter 1, Section 1.7, above.)

Also, in respect of formal concepts, Wittgenstein (1974a) commented;

A formal concept is given immediately any object falling under it is given. It is not possible, therefore, to introduce as primitive ideas objects belonging to a formal concept and the formal concept itself. So it is impossible, for example, to introduce as primitive ideas both the concept of a function and specific functions, as Russell does; or the concept of a number and particular numbers. (T. 4.12721).

Here Wittgenstein is saying that it is impossible to introduce a formal concept and its objects as independent entities. A formal concept is just the type of concept that cannot be separated from its objects. Thus, formal concepts are at the limits of sense because they can only be shown -and then only by the objects falling under them. Further, being at the limits of sense means that, "To ask whether a formal concept exists is nonsensical. For no proposition can be the answer to such a question." (T. 4.1274).

It is absolutely vital in understanding the *Tractatus* and in 'solving' self-referential paradoxes to be aware of two assumptions.

(1) Since determinate sense exists language must have an underlying formal structure. This formal structure must be at the very limits of sense if it underlies all language. Also, it must produce just the kind of structure that is found in language.

Actually, the emphasis on the form of language is even more radical than it may at first appear. The *Tractatus*, as Finch (1971, p. 229) argues, is not an attempt to construct a 'metaphysical picture' or a 'theory' about language and the world. Instead, it is concerned with formulating "not a likeness of the truth, but the truth itself in its entirety" (T. 5.5563).

This claim, which must seem like a gigantic delusion to the modern scientific mind, trained as it is in treating all knowledge claims as if they were fallible theories, is actually consistent with the overall approach of the *Tractatus*. If Wittgenstein wants to 'mean' logic as that which gives language its form then it would be inconsistent for him to also hold that his

propositions in fact only 'mean' a theoretical construct that somehow 'models' or represents the real, underlying logic.

Wittgenstein here 'bites the bullet' of structuralism. If a structural account is to be given of something as all-encompassing as the form of language, then the claim should be made that what is being described is the truth. That is, what is meant to be explained (logic) is logically beyond the scope of theories understood themselves as 'pictures'. To treat the propositions of the *Tractatus* as a theory would only lead to the production of a paradox. That is, one of the characteristics of a 'theory' about the underlying structure of language would be that such a 'theory' could not itself be considered a theory. As Wittgenstein (1974a) pointed out;

And anyway, is it really possible that in logic I should have to deal with forms that I can invent? What I have to deal with must be that which makes it possible for me to invent them. (T. 5.555).

If Wittgenstein, or anyone else, has anything at all to say about logic then what is said cannot be mere invention. In making these claims Wittgenstein is simply staying true to the whole structuralist orientation of the rest of the *Tractatus*.

This conviction is probably the reason that the propositions of the *Tractatus* have the feel of unsupported *ex cathedra* pronouncements to those who like to take their thinking in moderation.

However, -and secondly- there is another side to these apparently arrogant claims.

(2) As well as such a formal structure being necessary it must also only be *shown*. It must be impossible to say anything about this formal structure.

This feature is itself paradoxical and therefore is perhaps the more difficult point of the two to understand. Not least because the prohibition on saying anything sensible about such form may seem to imply a prohibition on thinking anything about such form. But it is possible that, as Finch (1971, p. 229-230) argued, it is only in language and not in thought that the difficulty of making sense arises (See Section 3.3, below). Whatever, the problem of how language can say anything about itself is exactly the same, in the

Tractatus 'scheme of things, as how any individual proposition can say anything about itself. And this is why understanding the 'logico-semantical paradoxes' should be very useful in understanding the *Tractatus* and the problems of reflexivity.

The application of the above approach to the logico-semantical paradoxes produces a solution that Goldstein (1983), at least, thinks is "the best on the market" (p. 138). Referring to the classic paradox 'This statement is false' -in the following discussion the terms 'proposition' and 'statement' are used interchangeably- Goldstein (1983) argued;

In such examples, the contained expression 'statement' poses as a proper concept-word and cannot be represented in the prescribed manner [that is, by using variables]. (p. 141. Brackets added).

Goldstein (1983) suggested that Wittgenstein viewed the concept 'statement' as a formal concept. This seems more than likely given Wittgenstein's (1974) argument that a proposition cannot make a statement about itself. The reason given is that "a propositional sign cannot be contained in itself" (T. 3.332). And the same reason is used to explain why a function cannot be its own argument (T. 3.333). A propositional sign could not be contained within itself if 'being a proposition' is an internal or formal property of the sign.

The 'Liar Paradox' was problematic for Russell because, as Finch (1971, pp. 90-92) pointed out, he rejected internal relations and therefore the immanence of forms in objects, language and the world. This meant that Russell was forced to introduce formal concepts separately, in the form of rules and meanings for signs. Wittgenstein (1974a), however, was convinced that this was a mistake (T. 3.331) and that at some point the symbols in language had to "speak for themselves" (T. 4.12721).

From Russell's viewpoint the sentence 'This statement is false' can appear paradoxical because the expression 'This statement' is allowed to be externally related to the whole sentence via the 'meanings' -supposedly introduced independently of any variables- of 'This' and 'statement'.

From Wittgenstein's viewpoint of internal relations and forms, however, it is impossible for a proposition to say something about itself. When the

concept 'statement' is used as if it were a proper concept rather than a formal concept the 'meaning' of the concept is substituted for the concept word -and this is how the paradox arises. But, when understood in formal terms, a symbol is recognized from its sign by observing "how it is used with a sense" (T. 3.326). That is;

A sign does not determine a logical form
unless it is taken together with its logico-
syntactical employment. (T. 3.327)

The meanings of signs -which set up external relations with other propositions -just do not enter into the process of recognizing a symbol from a sign. It is only "logical syntax" or "logical grammar," with its 'unspeakable' internal relations that can achieve this recognition (T. 3.33). Therefore, without 'meanings,' and with only structure left, there is no way a propositional sign can be contained in itself. In the same way, even the Escher drawing of an art gallery that on closer inspection turns out to only exist in one of the paintings it is exhibiting, cannot literally contain its entirety as an element in itself. (The drawing, in fact, can only be understood because it is 'in reality' a drawing. And, *that it is a drawing* 'shows' itself and cannot be 'said' by the drawing.)

Returning to Goldstein's (1983) argument, the assertion that a propositional sign cannot be contained within itself can be seen as "an instance of a general thesis about the incorrect use of those words that signify formal concepts" (p. 141). Therefore, the discussion above expressed as it is in terms of 'signs' and 'symbols' and 'meanings' can be restated in the language of formal concepts as they were previously outlined.

In the sentence 'This statement is false' the concept-word 'statement' is being used as a proper concept-word. That is, it is being used without representing it in terms of variables and therefore, according to Wittgenstein, it leads to "nonsensical pseudo-propositions" (T. 4.1272). In this way self-referential sentences *fail to be statements* . And only a statement can produce a paradox since only statements have 'sense'.

Such 'pseudo-statements' are nonsensical because formal concepts cannot be expressed as functions or classes (T. 4.1272). That is, logically there is no room outside a formal concept to draw a boundary around it or to define it and therefore give its sense. So any proposition that appears to be defining

or stating something about a formal concept must be 'stating' nonsense. Of course, this means such a proposition actually states nothing.

With the sentence 'This statement is false' there is a real difficulty in locating a variable for the concept-word 'statement' - that is, in answering the question 'What statement is false?' It is not satisfactory to say that the variable is the very sentence 'This statement is false,' since there is nothing to show that this sentence is in fact a statement, and therefore its own referent. That is, the original difficulty is discovering whether in fact these propositional signs have a sense -and thus form a *statement* - that can be true or false.

In other words, logical syntax seems to have broken down or be missing entirely. Only by first assuming that the sentence is in fact a statement can it be considered its own referent. However, in that case the only 'evidence' for it being a statement would be the assumption that it is a statement. In a superficial sense anything could be assumed or imagined to be a statement. But such 'assuming' or 'imagining' is not the same as the symbol for a variable showing that the variable falls under a particular formal concept. As Wittgenstein (1974a) said, the sign for a formal concept is "a distinctive feature of all symbols whose meanings fall under the concept" (T. 4.126).

If the word 'statement' represented a proper concept rather than a formal concept, other propositions that described the characteristics of statements could be used to determine whether 'This statement is false' is a statement. But no such possibility exists for formal concepts. The emptiness of the sentence 'This statement is false' is revealed by the question 'What is false?' No propositions can reply to this question.

So Wittgenstein's (1974a) response to the self-referential paradoxes, as Goldstein (1983) argued, is that they arise out of a failure to understand the nature of the concept-word 'statement' as a formal concept.

3.2.3 SUMMARY STATEMENT ON WITTGENSTEIN AND SELF-REFERENTIAL PARADOXES

To summarize, Wittgenstein used the self-referential nature of sentences such as 'This statement is false' to undermine their status as statements and, therefore, the belief that they say something. It is the idea of formal concepts that allowed him to do this. Formal concepts are 'given' as soon as variables

falling under them are used. Propositions that talk about such concepts without using variables are empty and nonsensical 'pseudo-propositions'. If such propositions were to make sense then, conversely, it could not be formal concepts they were talking about. It is only by assuming that they do mean formal concepts that the paradox occurs.

As may have been noticed throughout this section the *Tractatus* itself is in danger of trespassing against its own stipulations as to what cannot be said but can only be shown. The extent to which the propositions of the *Tractatus* are about the underlying logical form of language is the extent to which it may appear that Wittgenstein has built his own metaphysical paradox. However, Wittgenstein was aware of this fact and it is on this that the conclusions of the *Tractatus* centre. The following is a discussion of Wittgenstein's response to the apparent paradox contained within the *Tractatus*.

3.3 THE PARADOX OF THE *TRACTATUS*

3.3.1 INTRODUCTION

In the previous section the logico-semantical paradoxes were presented as examples of what lies beyond the limits of sense. Since one of the aims of the *Tractatus* was to draw a limit to what can be said this treatment of the paradoxes may at first sight seem quite appropriate. But in order to draw a boundary to what can be said the *Tractatus* must, and in fact does, say what 'things' cannot be said. It is obvious that 'saying what cannot be said' is itself a paradox.

Wittgenstein (1974a) was well aware of this paradox (T. 6.54) yet this did not deter him from writing the *Tractatus* or from being convinced of the truth of the thoughts communicated in the *Tractatus* (Preface, p. 4). So how can Wittgenstein on the one hand consider the propositions of the *Tractatus* nonsensical while maintaining that the thoughts expressed in the *Tractatus* are true?

One hint about the answer to this question can be found in the opening words of the Preface;

Perhaps this book will be understood only by someone who has himself already had the thoughts that are expressed in it -or at least similar thoughts.- So it is not a textbook. -Its purpose would be achieved if it gave pleasure to one person who read and understood it. (p. 3).

These comments may seem more appropriate for a work of serious fiction than for a philosophical treatise. However, they do suggest that there are thoughts to be 'understood' even though these are not communicated in the way a textbook communicates. Instead, the reader must, in a sense, already know what Wittgenstein is meaning. The *Tractatus*, therefore, to use its own terms, may be able to 'show' or 'manifest' what it means despite the nonsensical nature of what it 'says'.

Finch (1971, pp. 228-230) explained this same possibility by noting that, as previously mentioned, thoughts have a dual character. A thought can be a "logical picture of facts" (T. 3) or "a proposition with a sense" (T. 4). So while a thought may be nonsensical when expressed as a proposition it may still be possible for it to be meaningful as a logical picture of facts.

The importance to Wittgenstein of these thoughts that can 'only be meant' is confirmed by Engelmann (1967). By way of contrast Engelmann (1967) claimed that for philosophers such as the logical positivists "what we can speak about is all that matters in life" (p. 97), whereas for Wittgenstein "all that really matters in human life is precisely what, in his view, we must be silent about." (p. 97).

In order to fully understand why Wittgenstein's final proposition is an injunction to remain silent about what cannot be said it is worth examining the steps leading up to it. It is especially important for psychologists to be aware of these steps since they arise from a representational, 'symbolic' view of language and thought. And, of course, such representational approaches are common in psychology.

3.3.2 ELEMENTARY PROPOSITIONS AND TAUTOLOGIES

Central to the scheme of the *Tractatus* are what Wittgenstein terms 'elementary propositions'. He stated that it is "obvious" that an analysis of

propositions will arrive at elementary propositions, which he described in the following way;

The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs.

It is a sign of a proposition's being elementary that there can be no elementary proposition contradicting it.

An elementary proposition consists of names.
It is a nexus, a concatenation, of names. (T. 4.21, 4.211, 4.22)

All elementary propositions have truth-possibilities which are simply the possibilities of existence and non-existence of states of affairs (T. 4.3). And these truth-possibilities of elementary propositions are the "conditions of the truth and falsity of propositions" (T. 4.41).

With this structure established it then becomes a simple matter to formulate the truth-conditions for a particular proposition being true. The proposition is analysed into its constituent elementary propositions with their individual truth-possibilities. Then the combinations of the truth-possibilities that allow the proposition to be true can be clearly mapped out (T. 4.431-4.45). Under this system there are two extreme cases. When a proposition is *true* for all the truth-possibilities of the particular elementary propositions the proposition is a *tautology*. And when a proposition is *false* for all the truth-possibilities the proposition is a *contradiction* (T. 4.46).

Both tautologies and contradictions "lack sense" (T. 4.461). However, they are not entirely nonsensical. As Wittgenstein (1974a) put it, "they are part of the symbolism, much as '0' is part of the symbolism of arithmetic" (T. 4.4611).

Tautologies and contradictions share many features by virtue of being opposites (See T. 4.461-4.4661). For example, neither of them can determine reality because, "A tautology leaves open to reality the whole -the infinite whole- of logical space: a contradiction fills the whole of logical space leaving no point of it for reality." (T. 4.463). Despite this similarity it is Wittgenstein's characterization of the tautology which is of most interest

here. Therefore, the following discussion will only be concerned with tautologies.

Since tautologies are always true they cannot possibly be combinations of signs because "only determinate combinations of objects" could correspond to them if they were (T. 4.466). That is, the combination of objects that correspond to a tautology is indeterminate since it could be any combination at all. Tautology, like contradiction, represents the limiting case in which the combination of signs disintegrates (T. 4.466).

From this understanding of tautology an important insight is revealed. Since tautology is at the limit of a determinate combination of signs then from this vantage point it becomes possible to determine the *general form* of a proposition. And the general form of a proposition is, "This is how things stand." (T 4.5). *All* propositions, according to Wittgenstein (1974a), have this form. What is more, a proposition possesses this form by virtue of the particular elementary propositions of which it is comprised.

Wittgenstein (1974a) described a proposition as a *truth-function* and the elementary propositions that make it up, *truth-arguments* (T. 5, 5.01). Completing the nomenclature, the *truth-grounds* of a proposition are "those truth-possibilities of its truth-arguments that make it true" (T. 5.101). The importance of truth-grounds is that the truth of a proposition follows from another proposition if "all the truth-grounds of the latter are truth-grounds of the former." (T. 5.12). And where one proposition follows from another an 'inference' or 'deduction' can be made.

But, Wittgenstein (1974a) claimed that so-called 'Laws of Inference' are superfluous because the propositions involved in the inference are its only possible justification. That is, a law cannot provide any more justification for an inference than that already provided by the propositions involved. Because of this, "All deductions are made a priori" (T. 5.133) and, "One elementary proposition cannot be deduced from another" (T. 5.134). Linked to this understanding of inference is a claim that must be startling to the scientific mind. Wittgenstein (1974a) claimed;

There is no possible way of making an inference from the existence of one situation to the existence of another, entirely different situation. (T. 5.135).

There is no causal nexus to justify such an inference. (T. 5.136).

We cannot infer the events of the future from those of the present.

Superstition is nothing but belief in the causal nexus. (T. 5.1361).

This means that if propositions are made up of elementary propositions, and elementary propositions cannot be deduced from one another, then it must be impossible to infer one situation from another. Believing in a 'causal nexus' does nothing to justify such an inference because causality cannot bridge the logical 'gap' between elementary propositions. This becomes clearer when it is understood that, "The structures of propositions stand in internal relations to one another." (T. 5.2). Ultimately, the only connection between propositions must be based on their internal structures.

At the final level of analysis -where elementary propositions are to be found- it must be impossible to 'state' an external connection since such a statement would itself be composed of elementary propositions. And *these* elementary propositions would then have to be internally related to the propositions they were supposedly explicitly (externally) connecting. 'Causality,' expressed as some sort of 'Law' or feature of reality is an attempt to say what cannot be said (T. 6.36).

With these arguments concerning tautologies and the internal relationships between propositions Wittgenstein (1974a) was slowly preparing for his *coup de grace*. One final, and essential, concept is introduced before the finishing stroke is revealed. Wittgenstein (1974a) commented;

In order to give prominence to these internal relations [between the structures of propositions] we can adopt the following mode of expression: we can represent a proposition as the result of an operation that produces it out of other propositions (which are the bases of the operation). (T. 5.21. Brackets added).

Examples of operations include negation, logical addition and logical multiplication. Basically, an operation expresses how one proposition is made out of another (T. 5.23). An operation is not the "mark of a form, but

only of a difference between forms." (T. 5.241). In fact, "no statement is made by an operation"(T. 5.25).

The concept of an operation, then, simply notes that two propositions differ (which in the extreme case results in contradiction) and, also, that making one proposition from another depends on "the internal similarity of their forms" (T. 5.231) (which, in the extreme case, results in tautology).

Such operations take the place of 'logical constants' as used by Frege and Russell. In fact, Wittgenstein (1974a) claimed that there are no 'logical objects' or 'logical constants' (T. 5.4). And he argued for this by noting that all the so-called logical constants are interdefinable which implies that their signs ((e,g,) '.', '¬', '∨') are not primitive signs at all (T. 5.42). Because of this there is always more than one combination of operations that produces the same result from the same base.

This interchangeability and interdefinability of operations dissolves any possibility of there being a determinate sense to logical operations. Therefore the signs for 'logical constants' are not like names for 'logical objects'. Negation ('¬') is not, for example, to be treated as an object. If it were an object then '¬ ~ p' would say something different from 'p' because the first proposition would be about '¬' while 'p' would not (T. 5.44).

It is this approach that allowed Wittgenstein (1974a) to say that "in fact all the propositions of logic say the same thing, to wit nothing" (T. 5.43). The signs for logical operations are "punctuation marks" (T. 5.4611) -they add nothing to what is actually said. The idea of operations simply expresses the fact that the relationships between propositions are *internal* . With a proposition comes "the results of all truth-operations that have it as their base" (T. 5.442).

From this perspective it is only a small step to one of the most interesting conclusions in the *Tractatus* and the conclusion Bertrand Russell found most compelling (Ayer, 1985). Simply, Wittgenstein determined that "The propositions of logic are tautologies" (T. 6.1). The whole nature of logic understood as an underlying structure or framework to language (T. 6.124) leads inexorably to this conclusion.

Much could be said, and has been said, about the implications this conclusion has for the study of logic. For example, it should be possible to do without logical propositions entirely if Wittgenstein (1974a) is correct (T.

6.122). But the most interesting implication is the paradox that is the subject of this section. The propositions of the *Tractatus* concern the nature of logic and as such must themselves be tautological. They therefore say nothing. The following comment by Wittgenstein (1974a), however, shows how important the propositions of logic are *just because* they are tautological;

The propositions of logic describe the scaffolding of the world, or rather they represent it. They have no 'subject-matter'. They presuppose that names have meaning and elementary propositions sense; and that is their connexion with the world. It is clear that something about the world must be indicated by the fact that certain combinations of symbols -whose essence involves the possession of a determinate character- are tautologies. This contains the decisive point. We have said that some things are arbitrary in the symbols that we use and that some things are not. In logic it is only the latter that express: but that means that logic is not a field in which *we* express what we wish with the help of signs, but rather one in which the nature of the absolutely necessary signs speaks for itself. If we know the logical syntax of any sign-language, then we have already been given all the propositions of logic. (T. 6.124).

That the propositions of logic are tautologies reveals the ultimate and "absolutely necessary" nature of logic. In this ultimate sense, logic speaks through people rather than the reverse. The internal logical nature of propositions is revealed by the fact that when combined in a certain way they produce tautologies. This rendering of logic gives it remarkable properties. In logic there are no "surprises" (T. 6.1251); "process" and "result" are equivalent (T. 6.1251); and, "every proposition is its own proof" (T. 6.1265). Logic becomes something "transcendental" -a "mirror-image of the world" rather than a body of doctrine" (T. 6.13).

In the same way ethics and aesthetics, which are one and the same according to Wittgenstein (1974a), are transcendental and cannot be put into words (T. 6.421). The pseudo-propositions of both logic and ethics are attempts to say something from outside the limits of sense. The attempts must fail because

"All propositions are of equal value" (T. 6.4). Therefore, propositions "can express nothing that is higher [beyond sense]" (T. 6.42. Brackets added).

However, the *Tractatus* seems to make sense despite being itself composed of propositions of logic. How is this possible? It is possible if what Finch (1971) termed "apparent sense" and "apparent logical form" are permitted (pp. 226-230). A tautology can appear to have sense and logical form, particularly in "complicated cases" where the "recognition" of their tautological nature may require a proof which serves as "merely a mechanical expedient" (T. 6.1262). This apparent sense and form that the *Tractatus* epitomizes "holds up long enough to reveal what sense is by revealing that there is no sense in attempting to say what it is" (Finch, 1971, p. 227). Like a cartoon character momentarily suspended in mid-air after running over a cliff-edge, the reader of the *Tractatus* has just enough time to glimpse the illusory nature of his or her support.

Finch (1971) pointed out that fortunately Wittgenstein (1974a) himself mentioned some ways in which philosophy has generated nonsense. One of these ways is through a failure "to give a meaning to certain signs" in propositions (T. 6.53). Finch (1971) suggested that Wittgenstein knowingly failed to give a meaning for the word 'object', "the word for the fundamental case of meaning" (p. 227. Also, see Section 3.2.1, above). It should not be surprising that it is the word 'object' that finally has no meaning. For, even in common usage 'object' is meant to refer to that which is outside language and thought. Also, objects are central to the concept of representation since without a logical distinction between language and what language is about it is senseless to speak of representation.

Ironically, understanding the paradoxical nature of the *Tractatus* is, as Finch (1971, p. 228) noted, the best evidence for what its propositions try to say. Just as tautologies show the fact that they occur, so too the *Tractatus* reveals the absolute truth of its own approach by the fact that it can be understood - even if that understanding cannot be put into words.

The final proposition of the *Tractatus* points, insofar as it can, to this ineffable understanding. Wittgenstein (1974a) concluded, "What we cannot speak about we must pass over in silence" (T. 7). To see that nothing at all can be said about objects is to finally understand what they are (Finch, 1971, p. 229).

This realization is Wittgenstein's solution to the 'problem of life'. When an answer cannot be put into words then neither can the question (T. 6.5). The 'problem of life' is basically that the world exists rather than how, in particular, things are in the world (T. 6.44). To feel the world in this way as a "limited whole" (T. 6.45) is what is mystical, according to Wittgenstein. But it is not difficult to see how this feeling is directly related to using the word 'object' as a general term for the atoms that compose 'states of affairs' (facts) which in turn determine the world (T. 2.01, 1.11). Feeling the world as a whole cannot be put into words in the same way that the word 'object' has not been, and cannot be, given a meaning.

Furthermore, Wittgenstein (1974a) commented;

We feel that even when all *possible* scientific questions [questions that can be put into words] have been answered, the problems of life remain completely untouched. Of course there are then no questions left, and this itself is the answer. (T. 6.52. Brackets added).

Finch (1977, pp. 262-264) contrasted the fundamental positions of Heidegger and Wittgenstein on this point. According to Finch (1977), Heidegger, at least initially, wondered about the "existence of anything at all *rather than nothing* " (p. 263). Heidegger, that is, wondered about the *justification* for the world existing. Wittgenstein, however, simply *exclaimed* "How extraordinary that there is anything!" Such an exclamation amounts to silence since it says nothing determinate in much the same way that a startled person's sharp intake of breath says nothing.

For the non-logician one of the most remarkable aspects of the *Tractatus* is how it links precise, systematic and even apparently technical features of logic to questions and issues usually considered to be the most profound philosophy has to deal with. This linkage arises, however, quite naturally from the original aim of examining the *limits* of what can be said.

Psychology, when understood as a reflexive field of study, itself becomes an examination of limits. The following section briefly comments on some insights gained by applying aspects of the *Tractatus* ' scheme of things to the reflexive issues in psychology mentioned in previous Chapters.

3.4 PSYCHOLOGY AND THE *TRACTATUS*

3.4.1 INTRODUCTION

Previous sections discussed Wittgenstein's view of the relationship between language, thought and the world. Essentially this view is that language and thought in some way represent (or 're-present') the world in a determinate manner. This determinate relationship ensures determinacy of sense. And determinacy of sense was the characteristic of language that the *Tractatus* was designed to describe, explore and explain.

The need to explore determinate sense fully meant that one of Wittgenstein's main aims was to determine the limits of such sense. This in turn led to an examination of the necessarily formal structure of language and to the drawing of limits to what can and cannot be said about this structure. It was this formal nature of language that was used in Section 3.2.2 to try to clarify and then dissolve the problematic nature of self-referential sentences such as the Liar Paradox. Finally, after discussing the nature and role of tautologies in language, the paradox that the *Tractatus* itself manifests was discussed.

Hopefully it will now be clearer how the problematic issues of reflexivity can be linked to a particular view of the relationships between language, thought and the world. Paradoxes that arise from self-reference are, of course, among the most obviously problematic aspects of reflexivity.

At least historically, the study of psychology can be seen as a scientific approach to some traditional philosophical questions such as 'How do we know?', 'What do we know?', 'How do we perceive?', etc.. It is suggested here that psychology, by way of its philosophical origins, inherited an implicit view of the relationship between language, thought and the world that culminated, philosophically, in the *Tractatus*. According to Harris (1986) this view of language dominated Western philosophical thinking at least from the time of Augustine, carrying on right up to Russell and, of course, Wittgenstein in the *Tractatus*. If this is true then it is not surprising that the study of psychology has produced so many debates and problematic viewpoints that centre on the perceived reflexive nature of the study.

The following is a brief discussion of the various issues raised in Chapters --- in the light of the approach presented in the *Tractatus*.

3.4.2 THEORETICAL UNITY AND LIMITS

The first issue raised in Chapter 1 was the question of unity. It was suggested that there is a deep difficulty involved in unifying psychology at the theoretical level. Even the desirability of unifying theory has been questioned.

This difficulty can be understood now in terms of the limits of psychological theorizing. When psychology is understood as a reflexive discipline ((e.g.) when explaining what people do is also seen as something people do) then psychological theories inevitably become problematic attempts at drawing a boundary around the nature and form of all human actions. In just the same way, logic in the *Tractatus* had the role of determining the nature and form of all language. If this parallel between logic and psychological theories is valid then 'propositions of psychology' may have the same fate as propositions of logic in the *Tractatus*. And, in fact, understanding psychological theories as ultimately tautological does help 'predict' and 'explain' why theoretical unity in psychology is so elusive.

Because tautologies are true for *all* truth-possibilities they lack determinate sense. "In logic", Wittgenstein (1974a) claimed, "there is no co-ordinate status, and there can be no classification" (T. 5.453). And also, "The number of fundamental operations [in logic] that are necessary depends solely on our notation" (T. 5.474. Brackets added). What all this means is that because propositions of logic lack sense any apparent classifications of logical processes will depend solely on the way logic is expressed, that is, on the notation used. Attempts to judge or even compare different logical systems -not that having different logical systems is a possibility the *Tractatus* allows- must be futile if the form of a particular logic is purely a matter of notation rather than resulting from the sense that logical propositions are mistakenly presumed to possess.

The multiplicity and the apparent intellectual incommensurability of the many theories and approaches found in psychology were noted in Chapter 1, Section 1.2. These two features are to be predicted if approaches taken in psychology are in some sense different 'logics'. The particular 'notation' used by these various approaches would alone determine their forms. Under this view it would be misguided to compare theories in terms of the phenomena they supposedly refer to or 'mean' because they lack just such determinate sense.

The comparison being made here between propositions of logic and propositions of psychology is meant to be stronger than an analogy. Insofar as traditional logic and psychology share a view of the relationship of language, thought and the world, then it is difficult not to conclude that propositions of both logic and psychology are attempts to say things that their shared 'metaphysics' itself determines cannot be said.

To the extent that both logic and psychology are attempts to discover the formal structure that determines language, thought and 'purposive' behaviour, their propositions must lack determinate sense. 'Purposive' behaviour is included here because of its supposed 'meaningfulness'. (See Chapter 2, Section 2.2.1 for discussion of radical behaviourism's treatment of meaning). The idea that behaviour 'means' something ((e.g.) an 'intended' goal) implies that it has a sense in exactly the same way that propositions are thought to have sense. Therefore, it is suggested here that drawing a limit around purposive behaviour is the same exercise, in terms of the issues being discussed, as drawing a limit around language and thought.

If correct, this comparison suggests that propositions such as 'There are stimuli/responses/dispositions/cognitive maps/schemata etc.', necessarily lack determinate sense. And any attempt to determine which notation is best will itself be composed of equally nonsensical propositions.

In conclusion, the question of whether theoretical unity is possible becomes a nonsensical question in the following way. From the viewpoint of the *Tractatus* if propositions of psychology lack sense then it must be equally senseless to speak of different approaches (or even different 'notations'). It would also be senseless to say 'All approaches to psychology are the same'. Where there is no sense there can be no difference or sameness. And where there is no difference or sameness there can be no question of unity or disunity.

Now it may seem that this 'cure' is far worse than the 'disease' itself. However, two points need to be made. Firstly, just as the best vindication for the approach taken in the *Tractatus* can be seen as the failure of the *Tractatus* to say anything with sense, then, so too, the inability to say anything that has determinate sense in psychology may be the most important contribution psychology can make to 'knowledge' (But, of course, this cannot be said). Secondly, as has been mentioned, Wittgenstein himself came to repudiate some of the core assumptions of the *Tractatus*. In

particular, Wittgenstein freed himself from the assumption that there must be some essential feature of language that produced sense. This later approach of Wittgenstein's is presented in more detail in Chapter 4.

3.4.3 VALUES AND THE 'MYSTICAL'

It was argued in Chapter 1, Section 1.3 that psychology as a discipline can either reject or accept the idea that values act reflexively to steer human actions, including the 'action' of theorizing. Both options appear problematic. Ignoring values may risk developing an impoverished understanding of human actions. For example, as Kipnis (1987) claimed, when using a behavioural technology the belief that people are being controlled by the technology can influence how the controller behaves towards the controllee (p. 33).

Alternatively, attempting to incorporate values may lead to a subjective, qualitative, relativistic account of human actions. And this would appear to simply change the question from 'What is the best psychological theory?' to 'What is (are) the best value(s)?' Also, it could be argued that the values that actually determine a particular human action are always implicit and can never be made explicit by that particular action. Therefore, a theory that claims to make explicit the values it is based on may be simply distracting an investigator from 'seeing' the values the theory actually manifests.

This latter point, of course, relates to the discussion of self-reference in Section 3.2.2, above. A proposition could never be in the position of stating what values determine or underlie itself. This is because, as was argued, it is impossible for a proposition to state *anything* about itself (T. 3.332).

To believe that values in some way help to determine human actions is to assign to them a role that is, once again, much the same as that performed by logic in the *Tractatus*. And, in fact, logic and ethics (values) were linked by Wittgenstein (1974a) when he described them both as transcendental (T. 6.13, 6.421). The value of something must be outside the world because everything inside the world is, in a sense, accidental (T. 6.41). So values, lying outside the world, cannot be 'said' just as propositions of logic cannot be 'said'.

Values, then, become part of what Wittgenstein (1974a) termed the "mystical" (T. 6.522). While they cannot be put into words -and therefore

could not be incorporated into any theory, psychological or otherwise- they still "*make themselves manifest* " (T. 6.522).

One of the virtues of the scheme presented in the *Tractatus* is that it allows that there can be, and, in fact, must be, things that can be shown but not said. Values, therefore, cannot be denied or ignored, just as determinate sense cannot be denied or ignored in the *Tractatus* . In fact, determinate sense is, for Wittgenstein, just what language undeniably shows, and is just what the *Tractatus* tries to explain. It is the requirement that there must be determinate sense that ultimately means that logic must be transcendental, beyond the world. In the same way if there is any value it must be "outside the whole sphere of what happens and is the case" (T. 6.41).

Much of what Wittgenstein (1974a) said about logic can be transposed onto values if the comparison being made here is valid. For example, if "Logic must look after itself" (T. 5.473), then, so too, 'value' must ultimately look after itself. Values that could be 'said' would only be 'accidental' features of human actions and therefore arbitrary and relative. So such values would not themselves have any value.

Also, just as the "peculiar mark" of logical propositions is that their truth can be recognized from the symbol alone (T. 6.113) so too the truth (or 'goodness', or 'badness') of ethical propositions must be recognized solely from the symbol.

In conclusion, values so far as the *Tractatus* is concerned are part of the 'mystical'. As such, propositions about values lack sense and, therefore, cannot properly be incorporated into natural science theories. However, since a proposition about values shows its 'goodness' directly then it could be argued that it is important to make value statements about a theory to reveal such goodness. Of course, finally even this argument would lack sense -which is not to say that it does not show its own goodness. Values, as it were, can neither be hindered nor helped by things that are said.

3.4.4 APPLIED PSYCHOLOGY AND THE A PRIORI

In the discussion of 'pure' and 'applied' psychology (Chapter 1, Section 1.4) the comment was made that the distinction between the two had become blurred. According to some ((e.g.) Middleton and Edwards, 1985) theorizing

in psychology should be conceived as being interwoven with actual 'real world' needs. Theories, that is, should be 'ecologically valid'.

Furthermore, in the area of clinical psychology a distinction was made between those who advocate explicating the role of scientific method even in the "most intimate and moment-to-moment interactions with patients" (Shapiro, 1985), and those whose desire to explicate and prescribe methods is restrained by a competing desire for "congruence" and "empathy" between practitioner and client (Rogers and Stevens, 1967). This blurring of the distinction between 'pure' and 'applied' research is another feature of contemporary psychology that is explicable in terms of the comparison being made here between the propositions of logic and psychology.

The first point to be made is that Wittgenstein's (1974a) concern in the *Tractatus* is not for "what we can do in a perfect language but of the way in which ordinary language is able to function at all" (Finch, 1971, p.2). In this sense Wittgenstein is not in the business of improving language or constructing an ideal language (Finch, 1971, p. 74).

This claim contradicts Bertrand Russell's comments in the Introduction to the *Tractatus* where he repeatedly stated that Wittgenstein was concerned with the conditions for a logically perfect language (pp. ix, x). But it is now known that Wittgenstein was very unhappy with Russell's Introduction and thought it misrepresented his overall approach (Engelmann, 1967, p. 117). And Wittgenstein (1974a) certainly seemed to think he was unearthing the essence of "everyday language", whose complicated form tends to hide its own logic (T. 4.002). In fact when Russell said in the Introduction to the *Tractatus* , "Mr. Wittgenstein is concerned with the conditions for a logically perfect language -not that any language is logically perfect" he was directly contradicting Wittgenstein's (1974a) remark that, "all the propositions of our everyday language, just as they stand, are in perfect logical order" (T. 5.5563).

It is, then, 'everyday language' that Wittgenstein (1974a) described and explained in the *Tractatus* . Because it is the actual everyday language that is being examined Wittgenstein (1974a) argued against the logical possibility of being able to determine, *a priori* , the forms that language can take (T. 5.55 - 5.5571). This argument is very similar to the one presented in Section 3.2.2 against interpreting the *Tractatus* as merely a *theory* about language.

Wittgenstein (1974a) in this regard claimed;

Logic is prior to every experience -that something is so.

It is prior to the question 'How?', not prior to the question 'What?' (T. 5.552).

Logic in its ultimate formal role must be just that which enables it to be said that 'such-and-such is so'. And this is why a supposed 'theory of logic' which states 'Logic is so' cannot possibly anticipate actual logical form. Expressed differently, there can be no sayable relationship between a 'theory of logic' and the form of language that occurs in the actual application of logic.

The necessarily *a priori* status of logic, ironically, makes it impossible to make *a priori* statements -which themselves must be structured by logic- about the logical form of language. This is why Wittgenstein (1974a) said, "What belongs to its application, logic cannot anticipate" and, "It is clear that logic must not clash with its application" (T. 5.557).

If the 'science of psychology' parallels the 'science of logic' then it is no wonder that a blurring has occurred between the areas of 'pure' and 'applied' psychology. If logic cannot anticipate its application then can psychology anticipate its application? When psychology is understood naturalistically and reflexively, in the same way that logic is understood in the *Tractatus*, then the answer is 'no'. Therefore, assuming this answer is correct, there would be every reason to collapse the distinction between 'pure' and 'applied' psychology. This conclusion needs explaining in more detail.

Because the form and nature of logic cannot be stated *a priori* it is only in its application that logic shows itself. Similarly, propositions about human activity, understood reflexively do not state with determinate sense what its underlying nature and form is. This form must only be shown when the underlying nature is 'applied'. That is, when a particular, activity actually occurs. The 'application' occurring here is not the application of some theory but the instantiation of the actual underlying structure itself -the form of which cannot be pre-judged. Just as logic is the one thing that cannot be a theory but must be the thing itself (T. 5.5563. Also, see Section

3.2.2, above), so too, a 'psychology', understood, as it were, as logic cannot be a theory but must be the thing itself.

This is why it can be said, and understood quite literally, that a behaviourist's world is composed of stimuli, responses and reinforcement, and a cognitivist's world is full of, for example, information processing. Furthermore, it must be logically impossible to prescribe *a priori* a particular psychological approach for a particular situation. Wittgenstein (1974a) argued against defences of such prescriptions that appeal to the "so-called law of induction" (T. 6.31) or the law of causality (T. 6.32). These arguments will be mentioned in more detail below in Section 3.4.6 which examines causality and explanation in a reflexively understood psychology.

Not only does the present comparison between logic and psychology seem to 'predict' and 'explain' the blurring of the distinction between 'pure' and 'applied' psychology, but it also accounts for the presence of the Rogerian concept of 'congruence'.

As explained in Chapter 1, Section 1.4, the experience of congruence is not one that can be produced by following a prescribed method. Instead the therapist's own moment-by moment feelings must be "available to his awareness" so that he can "live these feelings" and "be them" (Rogers and Stevens, 1967, p. 53). In the present terminology, how the therapist should be feeling and acting is impossible to prescribe, at least with propositions having determinate sense. So, the attempt to explicate scientific method "even in the most intimate and moment-to-moment interactions with patients" would not help prescribe a method for producing congruence. Logically, at least, what a therapist might think or feel in a client-therapist interaction involving congruence cannot be anticipated.

Another way of making this point is to say that there is no overlap between logic and its application (T. 5.557). It is impossible to give *all* elementary propositions *a priori* since the number of names there are with different meanings cannot be given (T. 5.55). The latter cannot be given because names are logically independent of each other which in turn means elementary propositions are logically independent. This independence means that only in the application of logic is it possible to know what elementary propositions will occur.

In a client-therapist interaction, what a therapist might think -or think about what she or he feels- is, likewise, logically independent of any theory about what the therapist might think or feel.

In summary, the distinction between theory and application in psychology becomes blurred because of the reflexive way in which 'theorizing' is considered to be an example of what it is about. Such 'theories' cannot define their own limits *a priori*. So there remains a logical independence between theory and actuality which is not the case with theories that are not understood in this way. It is suggested here that it is the realization that this independence exists that is behind moves to integrate theory and application and the call for 'congruence' between client and therapist.

3.4.5 CONSCIOUSNESS, PERCEPTION AND SOLIPSISM

As described in Chapter 1, Sections 1.5, 1.6 and 1.7 the concepts of 'consciousness' and 'perception' are closely related. The study of perception attempts to causally and objectively link 'person' and 'reality'. Similarly, consciousness, as a concept, expresses a link between 'person' and 'reality' but, usually, this link is expressed in terms of a subjective property of the person. That is, a subject is 'conscious of' some aspect of the environment which is said to be 'in the consciousness' of the subject.

Because of this similarity, the type of theory of perception followed will depend to some extent on how consciousness is understood, and *vice versa*. Of the possible ways of understanding consciousness one way is to see it as a 'mental theatre' and another is to see it as a 'perceptual window' onto a wider reality. In the first case perception must provide a link between the world and its mental representation. In the second case perception must at least explain why, at a particular time, the window is viewing a certain subset of reality and not some other. Speaking in general, representational theories of perception would be associated with the former case while Gibsonian or 'Direct' theories of perception would be more suited to the latter case.

Difficulties with these differing accounts of perception and consciousness were discussed in Chapter 1. In particular, "non-progressive" transformations in the history of psychology between the 'Person constructs Reality' and 'Reality constructs Person' poles were mentioned (Buss, 1978).

These transformations were compared with the different views of 'reality' and the 'subject' held by Nagel (1974) and Dennett (1979). Such distinctions and comparisons along with the problems associated with theorizing about consciousness (See Chapter 1, Section 1.6) can now be explained from the viewpoint taken in the *Tractatus* .

To begin to understand why consciousness is so problematic as a concept Wittgenstein's (1974a) comments about the "metaphysical subject" (T. 5.641) should be considered. Wittgenstein (1974a) contrasted this 'subject' with "the human soul, with which psychology deals" (T. 5.641). It is interesting that Wittgenstein (1974a) called the 'subject' in psychology the "soul". Although never stated explicitly it is clear that by the 'soul' Wittgenstein meant an entity that is conceived of as being *part* of the world. In contrast, the metaphysical subject "does not belong to the world: rather it is a limit of the world" (T. 5.632). Just as the eye is not part of the visual field, the metaphysical subject is not part of the world (T. 5.633, 5.6331).

It is from the viewpoint of the *metaphysical subject* that so many apparent problems and paradoxes associated with the subject in psychology -such as solipsism (See Chapter 1, Section 1.7)- can be dissolved.

For the metaphysical subject "The world is *my* world" (T. 5.62). This is obviously not the case with the 'soul' or 'subject' in psychology -the world is always more than the world of a psychological subject. In simple terms, the argument for the equivalence of "the world" and "my world" runs as follows. *From the viewpoint of the metaphysical subject* it must be impossible to talk with sense about, and to mean, that which is beyond "my world". To do so would mean thinking what cannot be thought (T. 5.61). Wittgenstein (1974a) concluded;

For what the solipsist *means* is quite correct;
only it cannot be *said*, but makes itself
manifest. (T. 5.62).

In other words, what is right in solipsism is that "The world is *my* world". But what is wrong with solipsism, as Finch (1971, p. 152) pointed out, is the assertion that 'I alone exist'. The 'I' used in this way cannot possibly mean the metaphysical subject for the latter is not in the world but is at the limits of the world -which is why it can only be shown and not said. The 'I' could

only be referring to a "subject that thinks or entertains ideas" (T. 5.631). That is, a *psychological* subject.

In fact, Wittgenstein (1974a) went on to argue that no such subject exists (T. 5.631). As he remarked, if someone were to write a book called 'The World as I found it' the person's body and even those parts of the body which were or were not subordinate to the will would have to be included (T, 5.631). Everything that could be mentioned would be just more world which would go to show that "in an important sense there is no subject; for it alone could not be mentioned in that book." (T. 5.631).

Because no 'real' subject exists solipsism, for Wittgenstein (1974a), is not an extreme form of 'idealism' but rather it "coincides with pure realism", and the "self of solipsism shrinks to a point without extension, and there remains the reality co-ordinated with it." (T. 5.64).

This latter point helps explain why Buss' (1978) transformations between the poles of 'Person constructs Reality' and 'Reality constructs Person' have occurred so frequently in psychology. For the metaphysical subject 'my world' and 'the world' are equivalent. Therefore, 'Reality' ('the world') and 'Person' ('my world') are also equivalent. Such equivalence is possible only because the metaphysical subject is at the limits of the world and not in the world.

The two poles of 'Person constructs Reality' and 'Reality constructs Person' reflect two aspects of the metaphysical subject. The 'Person constructs Reality' pole seems to emphasize the metaphysical subject's role in co-ordinating reality (T. 5.64) and thus seeming to provide a meaningful structure to reality. Conversely, the 'Reality constructs Person' pole seems to reflect the fact that the metaphysical subject "shrinks to a point without extension" (T. 5.64) leaving no subject that "thinks or entertains ideas" (T. 5.631). Such a subject could not possibly construct reality.

These two aspects of the metaphysical subject also help to explain the divergence between 'representational' and 'direct' theories of perception and their associated approaches to consciousness. Representational theories of perception and 'mental theatre' views of consciousness appear to emphasize the experience of 'the world' as *content*, and therefore as 'my world'. The problems associated with 'content' (See Chapter 1, Section 1.6),

however, arise from a failure to acknowledge that it is only from the perspective of the metaphysical subject that 'content', as such, can be meant.

This can be clearly shown using the example of Natsoulas' (1981) "problem of awareness" (See discussion in Chapter 1, Section 1.6). It was noted that there are difficulties in speaking about the "intrinsic character" of an awareness as opposed to speaking about particular contents. It is suggested here that the "intrinsic character" of an awareness is the metaphysical subject's experience of 'the world' as 'my world'. And the reason why such an experience is so difficult to speak about is described well by Finch (1971);

On the one hand then, all the content of the world is mine or content for the *I*, but, on the other hand, this cannot be said (since we cannot speak about content), but rather is *meant* by the border between what can be said and what cannot be said marking just the border between what I experience and do not experience. (p. 156).

'Content' as sheer content, as it were, is not really even an experience. Rather, it is meant by the border between what is experienced and what is not. A similar point was made in Section 3.4.3, above, where it was described how logic must be prior to every experience and therefore, in a sense, the 'experience' of logic is not really an experience at all.

Put simply, the problems associated with representational theories of perception and consciousness occur because such theories are attempts to say the unsayable. It should be remembered that in the *Tractatus* to say something is to say something that has determinate sense.

With Gibsonian, or 'Direct', theories of perception 'the world' of the metaphysical subject remains 'the world' and the experience of content, as such, is ignored. There is no problem, therefore, in explaining how a representation relates to reality. Instead, all that need be done is to relate one part of the world, an organism's activity, to another part of the world, the structured energy that impinges upon an organism's receptors.

However, the co-ordinated reality of the metaphysical subject that Wittgenstein (1974a) spoke about has no *a priori* order (T. 5.634). Therefore, if the suggestion being made here that direct perceptionists are talking about the world of the metaphysical subject is correct, then, the world of direct

perception must also have no *a priori* order. So, despite the "global structure" of the world being lawfully organized (Michaels and Carello, 1981, p. 23), what an organism would perceive in a particular environment could never be specified prior to observing its activity.

In other words, whichever affordances are perceived by an organism could, at least logically, be other than they are. Michaels and Carello (1981) try to argue against this arbitrariness by claiming that the fit between affordances and actions is "insured by the law of compatibility, which says that only compatible things can coexist." (p. 112). Actions, that is, could not exist in an environment that does not have the appropriate affordances. And, an action can occur because the appropriate affordance is perceived (p. 42).

But, to the sceptic the 'law of compatibility' may be stating nothing more than the fact that, 'If an action does occur it can occur.' (For an example of such scepticism see Fodor (1980, p. 107). He stated, among other things, "The category 'affordance' seems to me to be a pure cheat: an attempt to have all the goodness out of intensionality without paying any of the price.")

The force of this criticism can be understood well using the comparison between the world of the metaphysical subject and that referred to by direct perception theory. Since the metaphysical subject is not part of the world, and yet reality remains co-ordinated with it -as to a point with no extension-, then there is no world left over that could be used to explain this apparent co-ordination. Similarly, the co-ordinated, or purposive, action of an organism is not explained by some other aspect of reality, such as a law of compatibility relating affordances and actions. In fact, perception as a phenomenon to be explained drops out of the picture, just as the metaphysical subject vanishes from the world. And structural and transformational invariants (See Chapter 1, Section 1.7.2, above) become the points around which an organism's actions are co-ordinated. Actually, the metaphysical subject could be thought of as the ultimate transformational invariant.

In summary, the viewpoint presented in the *Tractatus* seems to provide an effective way of understanding the different approaches taken towards consciousness and perception within psychology. Also, this viewpoint helps explain the difficulties associated with these approaches, for example, the solipsistic problems of representational theories of perception.

3.4.6 CAUSALITY, EXPLANATION AND LIMITS

In Chapter 1, Section 1.8 scientific knowledge was discussed in terms of three different views of the nature of scientific causal explanations. These three views were the positivist or standard view of science, scientific realism, and the social constructionist conception of scientific knowledge.

In that discussion it was concluded that the standard view of science is based on a view of meaning as 'use over time' while scientific realism depends on a view of meaning as 'reference'. Social constructionism, which claims to overcome this dichotomy, was considered to undermine its own claims and to misunderstand the implications of the methodology of radical doubt. It was suggested that a true reconciliation of the dichotomy would require a convergence of rational and causal explanation. As will now be argued, such a convergence occurs in the *Tractatus*.

At the limits of language, which for Wittgenstein in the *Tractatus* was equivalent to the limits of sense, 'Humean' or 'contingent' causality and 'generative' causality coincide. It is the concept of logic as underlying the form of *all* language and thought that produces this coincidence. On the one hand logic acts as a causal generative mechanism that must have just the nature and form needed to produce all possible propositions having sense. On the other hand, the ultimate underlying status of logic moves it into the 'transcendental' realm of the 'mystical' about which nothing can be said. And if nothing can be said directly about the nature of logic then all that is left to talk about are the observed 'lawful' or 'contingent' relationships within language and thought that *manifest* logic.

In the *Tractatus*, not only do two understandings of causality converge, but also rationality and causality themselves become logically (and causally) equivalent. Rationality, in terms of the *Tractatus*, can be understood as any language or thought that has sense. And, as has been discussed (See Section 3.2.1, above), sense is what logical pictures represent (T. 2.221). Rational thought and language, therefore, have logical form. The most important step in uniting rationality and causality is that, in Wittgenstein's scheme, for picturing to be possible at all a picture and what it pictures, that is, the world, must have logical form in common (T. 2.2). In terms of a generative view of causality, rationality and causality are equivalent because they share the same underlying mechanism -logical form. The logical form of language and thought is the same as the causal form of the world.

This equivalence between rationality and causality becomes even more apparent when a 'Humean' or 'contingent' view of causality is considered. As already discussed (Chapter 1, Section 1.8), with contingent causality a phenomenon is said to be explained once it becomes subsumed under a law.

Two comments by Wittgenstein (1974a) reveal how closely logic and causality are related. Firstly, he stated;

The exploration of logic means the exploration of everything that is subject to law. And outside logic everything is accidental. (T. 6.3).

And, secondly;

The law of causality is not a law but the form of a law. (T. 6.32).

The first comment states that the realm of order and lawfulness is the realm of logic. This makes sense since logic is meant to be the formal aspect of language and thought that provides for determinate sense. The second comment reveals that causality is not a law of nature because it is the very insight that underpins all laws. Wittgenstein (1974a) confirmed this by saying;

If there were a law of causality, it might be put in the following way: There are laws of nature.

But of course that cannot be said: it makes itself manifest. (T. 6.36).

And;

One might say, using Hertz's terminology, that only connexions that are subject to law are thinkable. (T. 6.361).

Lawfulness and 'thinkability' are one and the same. Of course, the logical positivists found in this equivalence a reason to promote science as the quintessential rational pursuit.

At the limits of language then, there is no distinction between the rational and the causal; at least in terms of what can be said. Given this, the view of

knowledge promoted by social constructionists such as Gergen (1988) can be better understood.

According to Gergen (1988) knowledge in psychology, and elsewhere, is a social construction that can be explained in terms of constructs such as "negotiation", "power" and "collusion" (Gergen, 1988; p. 31). Describing social constructionism more fully, Gergen (1988) stated;

Inquiry of this sort is premised on the assumption that propositions about the world (including persons) are not (and cannot be) built up inductively from observation. Rather, such propositions largely represent historically contingent conventions of intelligibility. Their truth or falsity, rationality or absurdity, reality or mysteriousness are all matters of social determination. (p. 35).

At first sight it may appear that rationality is being causally explained in terms of 'irrational' or at least conventional processes such as "negotiation", "power" and "collusion". However, with a minimum of interpretation it is possible to see these so-called irrational processes as manifestations of the logic of language, thought and even the world. This interpretation seems even more plausible given the following comments by Gergen (1988);

Regardless of the processes of social negotiation, collusion, exchange, and manipulation, this language [the "preformed mold of intelligible language"] is governed by existing conventions. These conventions will largely determine the contours of the propositions we commonly take to be knowledge. (p. 36. Brackets added).

It is these so-called "existing conventions" that seem to carry the same explanatory burden as that borne by logic in the *Tractatus* . It is clear that these conventions are explanatory because of the way they are assumed to govern -and exist prior to- particular instances of language use. And it seems that having this "preformed mold" of conventions is what makes language intelligible. Of course, logic, in the *Tractatus* , has just these features too.

The criticisms directed against social constructionism in Chapter 1, Section 1.8.4 can now be understood as criticizing it for claiming to say things about knowledge that, if true, cannot be said.

In summary, the *Tractatus* provides a framework that can conceptually unite contingent, or 'Humean', causality and generative causality. This framework also allows causality and rationality to be seen as equivalent. Both of these feats are possible because Wittgenstein (1974a) managed to push the possibility of making such distinctions into the world of what cannot be said. Logic, when seen as a generative causal mechanism for language and thought, cannot be talked about with sense and therefore generative and contingent causality become indistinguishable.

Similarly, rationality and causality can be equated because both refer to the lawfulness and order that language, thought and the world have in common. Causal connections in the world must be the same as the connections that are possible in logic since a world that did not have the same connections would be illogical and, therefore, could not be thought about. As Wittgenstein (1974a) put it, "what the law of causality is meant to exclude cannot even be described" (T. 6.362).

And, finally, it was argued that social constructionism could best be understood as an attempt to explain knowledge and rationality causally. But that this attempt fails because its putative causal constructs ("negotiation", "power", "collusion", etc.) manifest underlying conventions that carry the actual explanatory burden. And these conventions, it is claimed, occupy the same role in social constructionism as logic occupies in the *Tractatus*. Therefore, just as is the case with logic, propositions concerning these conventions must lack sense.

3.5 SUMMARY: PSYCHOLOGY AND THE *TRACTATUS*

It has been suggested here that much of the system presented in the *Tractatus* can be applied to psychology. The justification for this is based on the reflexive nature of both psychology and the *Tractatus*. The *Tractatus* is a book of propositions about propositions. Psychology, variously, can be

understood as thinking about thinking, knowing about knowing or behaving with respect to behaviour.

The fact that it is possible to draw so many plausible comparisons between the worldview detailed in the *Tractatus* and various areas of debate and conceptual difficulty within psychology, suggests in itself that such an overall comparison is at least worthwhile. If so, then it may also be worthwhile to consider the conclusions Wittgenstein (1974a) reached and apply them to psychology.

Of course, one of the main conclusions of the *Tractatus* was that the propositions of logic are tautological and therefore lack sense. If the propositions of psychology are similarly tautological then theorizing in psychology could also be said to lack sense and, therefore, substance. Just as all the logical constants are interdefinable (T. 5.42) it can seem, also, that concepts within a theory in psychology are interdefined and at no point 'reach out' and make contact with the world.

Gergen (1988) argued for a similar point by claiming that;

All reasonable propositions declaring a functional linkage between mental terms and observable events are analytically true ; that is, their truth is derived from the structure of the language as opposed to their relationship to observables. (p. 37).

And, Wittgenstein (1974a) made the same point when he said;

It is clear, however, that 'A believes p', 'A has the thought p', and 'A says p' are of the form "'p" says p': and this does not involve a correlation of a fact with an object, but rather the correlation of facts by means of the correlation of their objects. (T. 5.542).

That is, to 'believe', 'think' or 'say' a proposition is simply to say it with sense. The supposed relations between the object 'A' and the proposition 'p' referred to by the words 'believes', 'thinks', etc. are not relations at all. There are two reasons for this. Firstly, as already discussed, a psychological subject, or soul, does not exist (See Section 3.4.4, above). So there is nothing to which the proposition 'p' can be related.

Secondly, and more importantly in the present context, all that the words 'A believes ...', 'A has the thought ...', etc. signify is that the words 'p' have sense 'p'. That is, such propositions do not simply mean that certain sounds have been made (or certain neural activity has occurred). Rather, they indicate that the words have a sense which makes them part of the structure of logic. And once they are a part of logic the sense of words 'p' is nothing other than 'p'. It is then simply the logic of a particular situation that determines what theoretical processes can be used in a psychological explanation.

It is in the light of this view of the propositions of psychology that the topics of unity, values, applying psychology, consciousness, perception and explanation in psychology have been discussed. It is claimed here that an understanding of the problems present in these areas has been shown to be possible if the approach to the relationship between language, thought and the world taken by the *Tractatus* is adopted.

When Wittgenstein had finished writing the *Tractatus* he believed he had found the final solution to the problems of philosophy and logic (Preface to *Tractatus-Logico Philosophicus* , p. 4). So seriously did he have this belief that he quit the philosophical world after its completion. Therefore, if the parallels are to be continued, it could well be asked whether theorists in psychology should likewise abandon any hope of saying anything substantive about so-called psychological phenomena. Should psychologists join the more 'anti-theoretical' approach taken by those such as Skinner rather than attempt to give a structural explanation of the nature of psychological phenomena?

The remainder of this thesis will argue that there is an alternative to the dichotomy of either making tautological theories or not theorizing at all. This alternative, not unexpectedly, is related to the type of philosophizing carried out by Wittgenstein (1953; 1980; 1982) upon his return to academic philosophy after a ten year break.

The following section will outline this 'Late' philosophy of Wittgenstein.

CHAPTER FOUR

4 THE 'LATE' PHILOSOPHY OF WITTGENSTEIN

4.1 INTRODUCTION

Although Wittgenstein resumed writing philosophy in 1929 after a break of a decade, none of these later writings were published during his lifetime (Hilmy, 1987, Preface). It seems that Wittgenstein was largely dissatisfied with the content of many of these manuscripts and "Wittgenstein's later desire to publish seems to have arisen not so much because he felt relatively satisfied with a significant block of material, but rather because he learned that his results were in circulation in watered-down and garbled form." (Hilmy, 1987, p. 8. Also, see Preface to *Philosophical Investigations*).

But irrespective of Wittgenstein's own evaluations of his work it is clear that what he presents in his 'Late' philosophy is a distinctive *way* of thinking and doing philosophy. This is supported by several passages quoted by Hilmy (1987) from some of Wittgenstein's unpublished manuscripts. For example, Wittgenstein (cited in Hilmy, 1987) wrote:

What I should like to get you to do is (not to agree with me in particular opinions but) to investigate the matter in the right way. To notice the interesting kind of things (i.e., the

things which will serve as keys if you use them properly). (p. 5).

And;

What I want to teach you isn't opinions but a method. In fact the method to treat as irrelevant every question of opinion. (p. 5).

And further;

I don't try to make you *believe* something you don't believe, but to make you *do* something you won't *do* . (p. 5).

Even in an early version of the Preface to the *Philosophical Investigations* (abbreviated to 'P.I.' in the following discussions) -the most famous of Wittgenstein's posthumously published works- Wittgenstein (cited in Hilmy, 1987) stated, "One could call this book a text-book. A text-book, however, not in that it provides knowledge [Wissen] but rather in that it stimulates thinking [Denken]." (p. 6).

Hilmy (1987) went on to suggest that gaining an understanding of Wittgenstein's *method* must be the first and perhaps most important step towards "what should be the ultimate goal of Wittgenstein research - namely, an assessment of what philosophical conclusions he has to offer." (p. 3). However, an important point needs to be made about this "ultimate goal". If the researcher is in fact interested in having a clear understanding of *what Wittgenstein said* -perhaps in order to judge its truth or falsity- then the stated goal would be appropriate (although not necessarily insightful). But, if the researcher is instead interested in *understanding the philosophical problems that Wittgenstein addressed* , then, in an important sense, Wittgenstein's *opinions* on such problems would be irrelevant -as Wittgenstein's own comments, just quoted, would suggest. What *would* be relevant is the way Wittgenstein tried to clarify these problems.

This is an important point because it heralds "a radical break with the idea that language always functions in one way, always serves the same purpose: to convey thoughts -which may be about houses, pains, good and evil, or anything else you please." (P.I. 304). Ironically, a susceptibility to viewing language in just this restricted way may be indicated by an over-eager desire to assess Wittgenstein's "philosophical conclusions". That is, this limited

view of language may be so engrained that Wittgenstein's 'conclusions', 'opinions', 'views', etc. might be seen as expressions of thoughts about 'objects' of thought -thus perpetuating the very activity Wittgenstein wanted to change.

This point was made more clearly by Hilmy (1987) in his discussion of Wittgenstein's repudiation of "metalogue" (pp. 40-66). Hilmy (1987) argued that one of the main shifts in Wittgenstein's philosophy involved ceasing to view as 'metalogical' concepts such as "meaning", "understanding", "intention" and "virtually the whole gamut of 'psychological' concepts with which he was so ubiquitously preoccupied in his later writings" (p. 47). According to Hilmy (1987), what Wittgenstein means by 'metalogue' in his unpublished manuscripts and notebooks is simply "'something outside or beyond logic'" (p. 49). the 'somethings' that lie outside logic are the various psychological phenomena that can be assumed to lie behind words such as 'meaning' and 'understanding'. In particular, Wittgenstein saw as an error "the notion that the meaning ... of a word is an idea ... that accompanies the word" (cited in Hilmy, 1987, p. 53).

This repudiation of metalogue was apparently part of Wittgenstein's reaction to the scientific spirit of his time. Especially the spirit that led many of his contemporaries and immediate predecessors such as Bertrand Russell and William James to offer "pseudo-scientific psychological accounts of language" (Hilmy, 1987, p. 206). Wittgenstein was also reacting to some of his own earlier thought that had allowed psychological explanations to be seen as underpinning language because of his 'metalogical' view of 'meaning', 'understanding', etc..

And, as Hilmy (1987) persuasively argued, it seems that it was these attempts to, in essence, found philosophy on psychology that led Wittgenstein, in his later thought (from at least 1929 on), to state that it is not the job of philosophy to provide explanations or philosophical theories, or, in fact, to 'make discoveries'. For example, Wittgenstein (1953) commented:

It was true to say that our considerations could not be scientific ones. It was not of any possible interest to us to find out empirically 'that, contrary to our preconceived ideas, it is possible to think such-and-such' -whatever that may mean. (The conception of thought

as a gaseous medium.) And we may not advance any kind of theory. There must not be anything hypothetical in our considerations. We must do away with all *explanation*, and description alone must take its place. And this description gets its power of illumination -i.e. its purpose- from the philosophical problems. These are, of course, not empirical problems; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: *in despite of* an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known. Philosophy is a battle against the bewitchment of our intelligence by means of language. (P.I. 109).

And;

Philosophy may in no way interfere with the actual use of language; it can in the end only describe it.

For it cannot give it any foundation either.

It leaves everything as it is. (P.I. 124).

And, further;

Philosophy simply puts everything before us, and neither explains nor deduces anything. - Since everything lies open to view there is nothing to explain. For what is hidden, for example, is of no interest to us.

One might almost give the name "philosophy" to what is possible before all new discoveries and inventions. (P.I. 126).

Hilmy (1987, pp. 202-203) gave further examples from Wittgenstein's unpublished manuscripts which reveal that the avoidance of explanation - especially explanations of language- was, for Wittgenstein, one of the hallmarks of philosophy. Hilmy (1987) went on to point out that in the *Tractatus* Wittgenstein attempted to "solve philosophical problems by

offering *discoveries* about the essence or form of language" (p. 211), which included 'discovering' the general form of a proposition. And, further, it was no coincidence that this general form was "This is how things stand" (T. 4.5) -an 'essence' of *empirical* statements about the world -which in turn led to equating meaningful propositions with the propositions of natural science (T. 6.53).

It is now possible to suggest that the "radical break" Wittgenstein (1953) promoted in P.I. 304 is a break away from a view of language that has been implicit in the approach taken to phenomena by natural science.

It was in commenting on how to make a certain paradox disappear that Wittgenstein mentioned the need for this "radical break". The particular paradox Wittgenstein was referring to at the time was that the sensation of pain "is not a something, but not a nothing either!" (P.I. 304). While this paradox in itself may be of interest to psychologists what should also be noted is that what have been referred to here as the issues of reflexivity have similar paradoxical features.

For example, it could be said that 'values' in psychology are 'not something but not nothing either' (See Chapter 1, Section 1.3). And the same point could be made about the content of perceptions (See Chapter 1, Section 1.7.1) and, most obviously of all, the 'nature' of consciousness (See Chapter 1, Sections 1.5 and 1.6). Not quite so obvious is the fact that issues of theoretical unity, the distinction between 'pure'; and 'applied' psychology, and concerns about the nature of knowledge, causality and explanation also share this paradoxical nature (See Chapter 1, Sections 1.2, 1.4 and 1.8).

It is not necessary to detail, example by example, how each of these issues is paradoxical and, therefore, why a "radical break" from a certain view of language is required in each case. This is because it has already been noted in Chapter 1 that it is possible to see a common factor in all of these issues. The common factor is the presence of two distinct and often apparently incommensurable understandings of 'meaning': meaning as instantaneous reference, and; meaning as a practice or use extended over time. For present purposes it should therefore be enough to show that this bifurcated view of meaning is also at the heart of the kinds of philosophical problems and paradoxes that Wittgenstein addressed.

It is not difficult to see the way in which the *Tractatus* accepts and incorporates this bifurcated view of meaning. On the one hand there is what language (understood as 'names') can *mean* or 'refer to'. In the extreme case, of course, there is that which can *only* be meant (See Chapter 3). On the other hand there is that which can be *said*. And this involves the use of language over time. As Hilmy (1987) has suggested, Wittgenstein in the *Tractatus* had a 'metalogical' view of meaning which was used in an attempt to *explain* language -although this attempt ended in paradox (T. 6.54).

This 'metalogical' view can now be linked to the bifurcation of meaning. For what language and its signs must *mean*, or refer to, are the 'ideas' or 'thoughts' that lie behind them (Hilmy, 1987, pp. 63-64). Yet all that is available to speak and think about these 'ideas' and 'thoughts' are the signs which are used as part of an activity over time. That is, the only way one person can make another person, or his-or-herself, mean the same thought or idea is to use everyday language. Because of this, everyday language may appear to be "somehow too coarse (sic) and material for what we want to say" (P.I. 120). Everyday language can seem to be merely the 'representative' of the 'real' meaning.

In other words, the reflexive activity of talking about language may appear to be an attempt to describe what Wittgenstein called 'the primary' (Hilmy, 1987, p. 53). 'The primary' is 'consciousness', or some-such psychological hinterland, in which the actual sense of the signs and sentences that occur in using language can be found.

As Finch (1977) noted, it was "the peculiar activity of meaning" that Wittgenstein, early in his career, saw as that which allowed "complex things" to be treated as "simple objects" in order to establish an exact and definite sense for sentences (pp. 14-16). 'Meaning', therefore, was seen by Wittgenstein as a type of mental activity. It was only in his later writings that Wittgenstein (1953) commented that "nothing is more wrong-headed than calling meaning a mental activity!" (P.I. 693). Initially, though, it was these 'primary' activities that Wittgenstein believed lay hidden beneath language.

The task of philosophy, therefore, may appear to be that of describing this pure, fundamental world behind the words. As Wittgenstein (1953) said;

Here it is easy to get into that dead-end in philosophy, where one believes that the difficulty of the task consists in this: our having to describe phenomena that are hard to get hold of, the present experience that slips quickly by, or something of the kind. Where we find ordinary language too crude, and it looks as if we were having to do, not with the phenomena of every-day, but with ones that "easily elude us, and, in their coming to be and passing away, produce those others as an average effect". (P.I. 436).

This goal of producing a 'phenomenological language' was given up by Wittgenstein (Hilmy, 1987, p. 56). So was the closely related goal of discovering general, abstract features of language. For, as Hilmy (1987, pp. 61-66) argued, the desire to construct, for example, the general form of a proposition or of a number -as was done in the *Tractatus* - is very likely connected to the assumption that there is some pure 'idea' of what a proposition or what a number is *behind* the words. The 'ideal' is what is precise and as clear as crystal. It must be precise -or so it seems.

Now it can be understood why the requirement of definite sense in language was so compelling for Wittgenstein in his 'Early' philosophy (See Chapter 3). This requirement was just one aspect of an intellectually pervasive and, basically, *psychological* view of how language operates. Wittgenstein (1953), as ever, described this compulsion well;

The sense of a sentence -one would like to say- may, of course, leave this or that open, but the sentence must nevertheless have *a* definite sense. An indefinite sense -that would really not be a sense at *all* . -This is like: "An indefinite boundary is not really a boundary at all". Here one thinks perhaps: if I say "I have locked the man up fast in the room -there is only one door left open" -then I simply haven't locked him in at all; his being locked in is a sham. One would be inclined to say here: "You haven't done anything at all". An enclosure with a hole in it is as good as *none* . -But is that true? (P.I. 99).

A sentence must have a definite sense, it seems, to be able to achieve anything at all. If sentences have no sense then how could orders be understood and followed? How could descriptions describe anything? If there is no exact sense *somewhere* in a sentence then what *do* propositions assert? But, despite the apparent necessity that language must work in this way it is equally clear that this whole view of language must end in paradox.

This, of course, was precisely what Wittgenstein concluded in the *Tractatus* (T. 6.54. Also, see Chapter 3, Section 3.3, above).

It is no coincidence that the metalogical act of *meaning* 'such-and-such is the case' (P.I. 95) is exactly the same as the general form of a proposition 'discovered' in the *Tractatus* : "This is how things stand" (T. 4.5). 'Meaning something' is to thought what the general form of a proposition is to propositions or language. 'Meaning something' is the *essential nature* of thought just as the general form of a proposition is the essence of propositions.

There is a further way in which the paradoxical nature of the metalogical view of meaning is revealed. Wittgenstein (1953) commented, "When we say, and *mean* , that such-and-such is the case, we -and our meaning- do not stop anywhere short of the fact; but we mean: *this-is-so* ." (P.I. 95). That 'meaning something' does "not stop anywhere short of the fact" means that a thought, in order for it itself to mean something, must be implicitly *self-referential* .

In other words, *meaning a thought* cannot involve, for example, another thought that provides or explains the meaning of the first thought. For if this were the case determinacy of sense would be lost in an infinite regress of thoughts. And it is determinacy of sense that is required and needs explaining, according to this view of meaning.

As has already been discussed (Chapter 3, Section 3.2.2) it is the failure to recognize the nature of *formal concepts* that allows the self-referential paradox to arise. Although Wittgenstein (1974a) never explicitly stated that 'meaning', in the sense used here, is a formal concept it certainly has features in common with other formal concepts. For example, usually the concept 'meaning' (as intending) is expressed as a variable in terms of particular values. So someone might say, upon being misunderstood, "I did not mean 'X', I meant 'Y'." To then attempt to explain 'meaning'

independently of particular values would be to commit the same mistake that Wittgenstein (1974a) believed Russell made in trying to introduce separately the idea of a formal concept and the objects belonging to it. That is, it would be a mistake to try to state what the concept of 'meaning' (as intending) meant in order to, perhaps, determine if a particular object was 'meant'.

Whether or not the concept of 'meaning' should be thought of as a formal concept would require far more investigation than has been undertaken here. However, the important point is that there is an element of self-reference in the view of meaning being discussed at present. And this self-reference ends in paradox (See Chapter 3, Section 3.2.2).

To summarize; one of the major changes in Wittgenstein's philosophy between the 'Early' and 'Late' periods was a rejection of a 'metallogical' view of meaning. This view encounters difficulties because it involves bifurcating the concept of meaning.

On the one hand are the metallogical 'meanings' hidden in 'psychological space'. And, on the other hand are language and propositional thoughts which have 'sense' and are expressed over time. This bifurcation is reflected in many distinctions that occur in Wittgenstein's 'Early' philosophy. The most relevant distinction is that between 'meaning' and 'sense' in the *Tractatus* (See Finch, 1971, pp. 211-213). Names *mean* objects -but that cannot be stated- and propositions have *sense*. However, the two are combined in thought. For what finally guarantees the definite and exact sense of a proposition is that its sense is meant when it is thought -the thought, as it were, means the sense. That is, through thought a proposition's sense can be meant as a *simple object*. As a 'simple object' the sense of a proposition becomes irreducible and indivisible. It therefore possesses the final exactness required of it (See Finch, 1977, pp. 11-13).

If this account of Wittgenstein's understanding of the concept of 'meaning' in his 'Early' philosophy is correct -and if this understanding, admittedly in an extreme form, reflects a widespread understanding of meaning both in early twentieth century philosophy and psychology- then it is not difficult to see why psychologists should encounter seemingly intractable difficulties in theorizing. 'Thought' is what Wittgenstein (1974a) used to 'resolve' the paradoxes that arise from the original splitting of the concept of 'meaning'. As already mentioned in Chapter 3, Section 3.2.1.2, in order to fulfil this

cementing role thought itself takes on a dual nature. That is, "A logical picture of facts is a thought" (T. 3), and, "A thought is a proposition with sense." (T. 4). Therefore, to the extent that psychology deals with thought it is vulnerable to the problems and paradoxes arising from this dualistic understanding of thought.

What will now be discussed is how Wittgenstein in his 'Late' philosophy tried to avoid this metalogical view of meaning and the difficulties associated with it.

4.2 'POSSIBILITY', 'MEANING' AND 'ORDINARY LANGUAGE'

4.2.1 'POSSIBILITY' AND 'MEANING'

On his return to philosophy Wittgenstein saw the need for a "radical break" from metalogical approaches to understanding language. But, despite this need for a radical break from a view of language epitomized, of course, by the approach taken in the *Tractatus*, it is still possible to see Wittgenstein as having similar concerns in both his 'Early' and 'Late' philosophies. Finch (1977) characterized this similarity in terms of a "continuing commitment to such ideas as the *primacy of meaning* and the *immanence of meaning in language* ." (p. 2). In the *Tractatus* these ideas were expressed in the presuppositional status given to logic -which was of course what made logic so difficult to talk about with sense. Logic in this way was able to delimit the *possible*. This "fundamental perspective" belongs to what Finch (1977) claimed is "a long tradition in philosophy -that the *actual is intelligible* (indeed is anything) *only in terms of the possible* ." (p. 6).

'Possibility', that is, provides the extra dimension that makes 'what is' understandable. The *Tractatus* explored possibility by describing the supposed internal structure of language which was meant to determine all that language could represent or say. But by the time of writing the *Philosophical Investigations*, Wittgenstein's interest in the possibilities of phenomena had become complete. So complete that even the idea that there is, in essence, just one way that language operates -that is, by representing the world- had to be dropped.

According to Finch (1977), Wittgenstein's first step towards totally embracing 'possibility' could occur "when it became clear that *any* projection *could* be done in some other way, so that the hold of the idea of the 'only possible final interpretation' was broken" (p. 6). And it was this realization that finally served to undermine language. If there is no final interpretation then there can be no ultimate 'essence'. Wittgenstein (1953) referred to this changed emphasis when he said;

We feel as if we had to *penetrate* phenomena: our investigation, however, is directed not towards phenomena, but, as one might say, towards the '*possibilities*' of phenomena. We remind ourselves, that is to say, of the *kind of statement* that we make about phenomena. (P.I. 90).

An interest in the "kind of statement" made about phenomena indicates that the new emphasis in Wittgenstein's philosophy was on the *use* that is made of words. It is a common-place to say that in his 'Late' philosophy Wittgenstein claimed the meaning of a word is its 'use'. In fact, Wittgenstein (1953) stated as much;

For a large class of cases -though not for all- in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language. (P.I. 43).

But, it would be a mistake to think that Wittgenstein is here claiming that the way to discover the meaning of a word is simply to look and see how the particular word has *in fact* been used -as if *observed* uses delimit the meaning of a word for all time, or even for the present moment. The investigation requires a bit more 'intelligence' than that.

Factual -or *actual* - uses of words are certainly important to Wittgenstein and are used in his method of "assembling reminders" to clarify philosophical problems. For example, Wittgenstein (1953) commented;

When philosophers use a word - "knowledge", "being", "object", "I", "proposition", "name" -and try to grasp the *essence* of the thing, one must always ask oneself: is the word ever actually used in this

way in the language-game which is its original home? (P.I. 115).

But, while an appeal to the way words are "actually used" is often very helpful another aspect of the use of words is just as important. As well as the *actual* use of words there is the *possible* use of words. Finch (1977) believed that this distinction is revealed in the different ways Wittgenstein (1953) used the German words "*Gebrauch* " (actual or established use) and "*Verwendung* " (possible use) (pp. 27-30). The distinction is subtler than it may at first appear. For example, Finch (1977) noted that *Verwendung* is sometimes used by Wittgenstein (1953) to refer to an actual use of a word, "but only when the use is other than the customary one." (p. 28). The following examples provided by Finch (1977) clearly show how the two German words are used by Wittgenstein (1953);

imaginary uses (P.I. 6), metaphysical uses (P.I. 116), "unheard-of" uses (P.I. 133), and figurative uses (P.I. p. 215) are all cases of *Verwendung* ; what is learnt (P.I. 6), practiced (P.I. 9), and defined (P.I. 30) are cases of *Gebrauch* . (p. 28).

Such a distinction should now appear familiar since, in many ways, it echoes the distinction made between 'meaning' and 'sense' in the *Tractatus* (Finch, 1977, p. 27). On the one hand the established determinate uses of words (*Gebrauch*) reflect the determinate meanings of names in the *Tractatus* . On the other hand, the possible uses of words reflect the necessarily *indeterminate* number of elementary propositions and the fact that only the "application of logic decides what elementary propositions there are" (T. 5.557-5.5571). That is, there is always the possibility of constructing new and previously unimagined propositions because of the impossibility of stating, *a priori* , all elementary propositions.

Even more interesting is that Wittgenstein (1953) spoke of *Verwendung* in connection with "*ideas , understanding , expectation* and the *mind* , while *Gebrauch* is what is *prescribed* and *described* and *given an account of* ." (Finch, 1977, p.30). This particular contrast is interesting because it shows very clearly the difference between, on the one hand, meaning as an idea, an understanding or an imagined possible use that can be "grasped in a flash"; and, on the other hand, meaning as a prescription for, or an account of, an actual use "spread out in time" (Finch, 1977, p. 30).

This difference is the same difference that was emphasized in the discussions of various reflexive issues in psychology in Chapter 1. Many of the problems pointed out in those discussions arose from the apparent incommensurability of these two views of meaning. Therefore, it would now be worth examining Wittgenstein's (1953) attempt to reconcile these views.

4.2.1.1 Reconciling Two Forms of Meaning

In sections 138-142 of the *Philosophical Investigations* Wittgenstein (1953) dealt with the difficulty of reconciling meaning as a use extended in time and meaning as a use that can be understood and 'grasped in a flash'. The first step is to present the problem;

But can't the meaning of a word that I understand fit the sense of a sentence that I understand? Or the meaning of one word fit the meaning of another? -Of course, if the meaning is the *use* we make of the word, it makes no sense to speak of such 'fitting.' But we *understand* the meaning of a word when we hear or say it; we grasp it in a flash, and what we grasp in this way is surely something different from the 'use' which is extended in time! (P.I. 138).

That is, if a word's meaning is just the use that is made of the word then how can the meaning of a word also be something that can be 'grasped in a flash'? In both cases the use of the word 'meaning' seems quite natural and valid. But the problem is: How can something that by its nature is extended in time also be something that can be 'grasped in a flash'?

This dilemma is analogous to the wave/particle duality theory in physics. While in their day-to-day work physicists may quite comfortably speak of the wave/particle duality of light it remains a problem for the philosopher. For how can the words 'dual nature' be anything but a contradiction in terms? And, just as is the case with light, the two forms of meaning seem too discrete and mutually exclusive to be two aspects of some hypothesized underlying reality. As Wittgenstein (1953) went on to describe;

When someone says the word "cube" to me, for example, I know what it means. But can

the whole *use* of the word come before my mind, when I *understand* it in this way?

Well, but on the other hand isn't the meaning of the word also determined by this use? And can't these ways of determining meaning conflict? Can what we grasp *in a flash* accord with a use, fit or fail to fit it? And how can what is present to us in an instant, what comes before our mind in an instant, fit a *use*? (P.I. 139).

The conflict, then, is between two ways of *determining* meaning. The next step Wittgenstein (1953) took was to suggest that what comes "before our mind" when a word is understood is a picture, or "something like a picture" (P.I. 139). He then pointed out that while such a picture can "suggest" a certain use it can always be used in a different way (P.I. 139). That is, for any picture it is possible to imagine a *method of projection* that would enable it to 'fit' more than one use.

However, it can often seem that a picture *forces* a particular application on those who picture it. There may then seem to be, not a logical, but a *psychological* compulsion connected with the picture (P.I. 140). But the feeling of compulsion stems just from the fact that while there are other possible applications of a picture "only the one case and no other occurred to us" (P.I. 140. Also, see Chapter 2, Section 2.2.4 for a discussion of Darwinian explanation and causality that makes a related point). Nevertheless, for Wittgenstein (1953);

What is essential is to see that the same thing can come before our minds when we hear the word and the application still be different. Has it the *same* meaning both times? I think we shall say not. (P.I. 140).

So far, then, there are pictures of words which can suggest ways to apply the words but cannot determine how they are to be used since other applications can 'fit' the pictures too.

Wittgenstein's (1953) next step was to ask whether the way a picture is to be applied, its method of projection, can come before someone's mind and determine the application of a picture (P.I. 141). Of course if a picture of an application 'came before someone's mind' it would be possible to imagine

more than one way of applying *this* picture. So it may appear that no progress is made by picturing an application.

However, introducing the concept of 'application' is vital in Wittgenstein's (1953) attempt to reconcile the two forms of meaning. 'Use' understood as an application is an intermediate case between a 'use' which is extended in time and a 'use' that can be grasped in a flash. This intermediate position was discussed by Wittgenstein (1953) in terms of the two types of criteria that are used to decide when a particular application comes before someone's mind. Wittgenstein (1953) commented;

Now clearly we accept two different kinds of criteria for this: on the one hand the picture (of whatever kind) that at some time or other comes before his mind; on the other the application which -in the course of time- he makes of what he imagines. (And can't it be clearly seen here that it is absolutely inessential for the picture to exist in his imagination rather than as a drawing or model in front of him; or again as something that he himself constructs as a model?). (P.I. 141).

The helpful thing about 'use' in the sense of an application is that it is quite natural to speak of *both* a picture (or drawing, or model) of an application and of an application as something extended in time.

However, there *can* be a 'collision' between a picture of an application and *its* application over time. But this 'collision' is not unavoidable as seemed to be the case with the two distinct forms of meaning. Rather, there is a 'collision' only "inasmuch as the picture makes us expect a different use, because people in general apply *this* picture like *this* " (P.I. 141). That is, like any picture, the picture of an application *does not determine but only suggests the way in which it is to be applied* . And this quite simple point is the insight that will be so helpful in dissolving the problems associated with the issues of reflexivity (See Chapter 5, below).

Finally, then, when someone grasps the meaning of a word 'in a flash' it does not have to mean that *what* has been grasped is the 'use' (meaning) of the word extended in time. What is grasped might be "something like a picture". It is the notion that such a picture can only be applied in one way

that sets up a collision between the two ways of determining meaning. For if by its nature the meaning of a word is its use extended in time then how can an instantaneous 'picture' or 'understanding' *also* be the meaning of a word? Just as the wind cannot be grasped in a fist so too a practice extended in time cannot be grasped in a flash.

But rather than abandoning or emphasizing one way of determining meaning in favour of another -as, for example, a behaviourist of the philosophical or psychological type may be tempted to do- Wittgenstein (1953) sought to understand and thus vindicate the fact that both forms of meaning are called 'meaning' in everyday language. And it is in the sense of 'use' as an application that this understanding and vindication can be achieved. The concept of 'applying something' allows talk of both something (like a picture) to be applied *and* of a process of applying it over time.

Despite the way in which this 'intermediate' sense of the word 'use' helps to clarify why both meaning as something 'grasped in a flash' and as something extended in time can be called the meaning of a word, it may seem that too high a price has been paid. For it is apparent that in the concept of 'applying something' there is always the possibility of applying something *in more than one way* . What has been 'lost', of course, is any concept of final determinate meaning.

It can now be clearly seen that Wittgenstein (1953) completely abandoned what he came to see as the chimaera of determinacy. Instead, his sole aim was to understand things clearly:

A main source of our failure to understand is that we do not *command a clear view* of the use of our words. -Our grammar is lacking in this sort of perspicuity. A perspicuous representation produces just that understanding which consists in 'seeing connexions'. Hence the importance of finding and inventing *intermediate cases* . (P.I. 122).

And;

A philosophical problem has the form: "I don't know my way about". (P.I. 123).

It may superficially seem that determinacy is the best or even the 'only real' way of finding one's "way about". After all, what surer path could there be than a determined path? And the *Tractatus* took just this view by insisting on the absolute requirement that sense be determinate. While stating that propositions are pictures or models of reality (T. 4.01) Wittgenstein (1974a), as Finch (1977, pp. 32-33) noted, treated the requirement that language must relate to the world in a determinate way as something more than a picture. As Wittgenstein (1953) said;

A *picture* held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably. (P.I. 115).

It seemed, that is, as if there was only one possible way of applying the picture of an 'isomorphic projection' between language and the world. This picture was of course a picture of an application. But nevertheless, as Finch (1977) commented;

Even a picture of an application cannot determine how that picture itself is to be used. There is always the possibility of doing something else with it. The entire crystalline ontology of the *Tractatus* derived its power from the idea that the picture of an isomorphic mapping itself could only be applied in one way, i.e. the idea that *that* picture determined its own application. (p. 33).

The endpoint of such absolute, underlying determinacy was the paradox that the propositions of the *Tractatus* itself were nonsensical. In a sense Wittgenstein (1974a) tried to salvage 'possibility' from 'determinacy' by *saying* that there were things that could be shown but not said -possibility, that is, beyond the limits of what could possibly be said. Even the ultimate deterministic metaphysics presented in the *Tractatus* still needed, even begged, for a greater 'world' of possibility. And the only place for this 'world' was outside the world.

4.2.2 ORDINARY LANGUAGE

It has been said that 'good' has one enemy and that is 'evil'; but 'evil' has two enemies, 'good' and itself. Without any intention of shading this discussion with moral tones, in a similar way it could be said that 'possibility' has 'determinism' as its only counter, but 'determinism' is countered both by 'possibility' *and* itself. In fact, one way to avoid the nonsensical and self-destructive endpoint of the *Tractatus* is to realize that it is possible to apply the deterministic picture of the relationship between language and the world in more than one way. That is, it is only by introducing more possibilities that determinism can be saved from itself.

Therefore, if there is no determinate form underlying language there remains simply 'normal' and 'abnormal' uses of words. Wittgenstein (1953) described this 'conventionalism' in the following terms;

It is only in normal cases that the use of a word is clearly prescribed; we know, are in no doubt, what to say in this or that case. The more abnormal the case, the more doubtful it becomes what we are to say. And if things were quite different from what they actually are -if there were for instance no characteristic expression of pain, of fear, of joy; if rule became exception and exception rule; or if both became phenomena of roughly equal frequency- this would make our normal language-games lose their point. (P.I. 142).

It would be a mistake to think that this type of 'conventionalism' is either 'soft', therefore allowing a drift into arbitrariness, or 'hard' in the determinate even causal sense used by Gergen (1988) (See Chapter 3, Section 3.4.6, above for mention of Gergen's (1988) view of conventions). 'Conventional' or 'normal' cases are in a sense the 'hardest' and least arbitrary things there are. Like 'ordinary certainties' (See Chapter 1, Section 1.8.4) they are so normal that they are hardly ever questioned or even noticed. Nevertheless, even these cases are conventional rather than determinate or causal since if they were truly determinate in the sense taken in the *Tractatus* their determinate nature could not be talked about with sense.

In both his 'Early' and 'Late' philosophies Wittgenstein began with the assumption that 'ordinary language' *does* make sense and *is* understood. People talk about phenomena and understand each other. Even when people do not understand each other, *that too* can be understood and talked about. However, in his 'Early' philosophy Wittgenstein further assumed that this capacity of language must depend on some determinate form common to both language and the world. This assumption moved the focus from 'ordinary language' and towards the 'hidden essence' of language.

In his 'Late' philosophy, however, the focus of Wittgenstein's investigations returned to ordinary or 'everyday' language -the 'natural home' of the phenomena of language. Surveying the conventional and unconventional ways in which words *are* used and *could be* used became, for Wittgenstein, the means by which philosophical problems were to be understood. Hilmy (1987) linked this new emphasis on ordinary language to Wittgenstein's rejection of a metalogical view of psychological concepts and concluded in the following way;

The evidence has demonstrated that by the early 1930s Wittgenstein had already shifted to ordinary language as the proper domain of logic and repudiated his earlier metalogical views, thus 'opening the gates' to the logical investigation of psychological concepts which so preoccupied him during the last two decades of his life. (p. 66).

As Hilmy (1987) also noted, the domain of ordinary language was viewed by Wittgenstein, post-1929, "not merely as the *source* of philosophical confusion (this may always have been his view) but also as the *means* by which philosophical confusions are to be eliminated" (p. 56).

Ordinary or everyday language is "language in a common-or-garden sense" (Hilmy, 1987, p. 49). Wittgenstein (1953) repeatedly referred to the way in which language and words are "actually used" ((e.g.) P.I. 117, 124, 134) and saw his task as bringing "words back from their metaphysical to their everyday usage" (P.I. 116). In fact, there is a sense in which ordinary language *must* be the correct domain of philosophy and logic as Wittgenstein (1953) pointed out in the following passage;

When I talk about language (words, sentences, etc.) I must speak the language of every day. Is this language somehow too coarse [sic] and material for what we want to say? *Then how is another one to be constructed ?* -And how strange that we should be able to do anything at all with the one we have!

In giving explanations I already have to use language full-blown (not some sort of preparatory, provisional one); this by itself shows that I can adduce only exterior facts about language.

Yes, but then how can these explanations satisfy us? -Well, your very questions were framed in this language; they had to be expressed in this language, if there was anything to ask!

And your scruples are misunderstandings.
(P.I. 120. Brackets added).

Ordinary language is just the place where all the questions, understandings, confusions, answers, etc. are to be found. But, unlike the pure, crystalline world of logic that the *Tractatus* insisted defined the world of such phenomena, ordinary language is ruled by possibility rather than determinacy. In the domain of ordinary language problems are resolved by 'remembering' different uses of words (P.I. 127), 'imagining' possible situations and uses of words (P.I. 139) and 'constructing' hypothetical 'language-games' (See Section 4.3, below for a discussion of 'language-games') to clarify uses of words and to bring out similarities and dissimilarities in the facts of language (P.I. 130).

The phrase "ordinary language is ruled by possibility" here refers to the fact that ordinary language can handle, although not necessarily 'solve', *any* problem. This is because it is just this language -or the grammar of this language (See Section 4.3, below for a discussion of 'grammar')- that gives the problem its form. In this sense there are no *limits* to ordinary language. This contrasts, of course, with the limits that *must* be present if language is defined and constrained by an underlying determinate logic -even if these

limits cannot be said, since that would involve going beyond the limits in order to define them.

In P.I. 101-108 and surrounding passages Wittgenstein (1953) highlighted this new emphasis on ordinary language by contrasting it with his previous attempts to unearth "The strict and clear rules of the logical structure of propositions" that lay, as it seemed, "hidden in the medium of the understanding" (P.I. 102).

This new emphasis is linked to what Hilmy (1987) termed "Wittgenstein's thinking concerning the proper role of the 'ideal'" (p. 69). The pure, crystalline, 'ideal' structure was something that Wittgenstein, early in his career, believed "'must' be found in reality", and this because "we think we already see it there" (P.I. 101). The 'ideal' therefore becomes "unshakable" and "There is no outside; outside you cannot breathe" (P.I. 103). It is the need to find this 'ideal' order that causes philosophers to become "dissatisfied with what are ordinarily called 'propositions', 'words', 'signs'" (P.I. 105). But this search for the 'ideal' is misleading according to Wittgenstein (1953). As he put it;

Here it is difficult as it were to keep our heads up, -to see that we must stick to the subjects of our every-day thinking, and not go astray and imagine that we have to describe extreme subtleties, which in turn we are after all quite unable to describe with the means at our disposal. We feel as if we had to repair a torn spider's web with our fingers. (P.I. 106).

The narrower and narrower examination of language, encouraged by this view of the hidden 'ideal', only increases the problems it is supposed to solve;

The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a *result of investigation* : it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming empty. -We have got on to slippery ice where there is no friction and so in a certain sense the conditions are ideal.

but also, just because of that, we are unable to walk. We want to walk: so we need *friction* .
Back to the rough ground! (P.I. 107).

Of course, the "rough ground" is ordinary language, the place where even the abstract and seemingly esoteric research of the philosopher has its home. As the term 'ordinary language' suggests, the shift to this view of language meant ceasing to see language as a special phenomenon. Language becomes a phenomenon like any other. But, as Finch (1977) remarked, there is still a need "to do justice to the paradigmatic character of language" (p. 189). The "paradigmatic character" is that aspect of language seen as an all-enveloping phenomenon. The difficulty, of course, is seeing this aspect without feeling that one must leave language in order to see it. This difficulty is overcome by seeing language in terms of its aspects, of which its paradigmatic character is only one, "combined with the idea of a rearrangement to make an aspect clearly visible" (Finch, 1977, p. 189).

The change in Wittgenstein's thinking was from seeing the essence of language as "something that lies *beneath* the surface" and must be dug up by analysis, to seeing essence as "something that already lies open to view and that becomes surveyable by a rearrangement" (P.I. 92). By rearranging the possibilities of phenomena a path can be found that is "equivalent to 'seeing' the grammar of the world, but this time not as a hidden ontological dimension, but as the phenomena seen in a different way" (Finch, 1977, p. 189).

The important thing in philosophy is to gain a surveyable arrangement of phenomena in order to have "*complete* clarity" which "simply means that philosophical problems should *completely* disappear" (P.I. 133). In the *Tractatus* , and the philosophy it epitomizes, the desire for exactness became confused with the need for clarity so that it seemed that 'complete clarity' meant 'complete exactness'. Wittgenstein (1953) described this confused view in the following way:

It can also be put like this: we eliminate misunderstandings by making our expressions more exact; but now it may look as if we were moving towards a particular state, a state of complete exactness; and as if this were the real goal of our investigation. (P.I. 91).

And;

'The essence is hidden from us ': this is the form our problem now assumes. We ask: *'What is language?', 'What is a proposition?'* And the answer to these questions is to be given once for all; and independently of any future experience. (P.I. 92).

This goal of exactness takes on a life of its own obscuring the fact that the *real need* is for clarity and not exactness. This 'real need' was probably what Wittgenstein (1953) had in mind when he made the following remark;

The *preconceived idea* of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need.) (P.I. 108).

So there is no need in philosophy to produce an account of the nature of language in order to explain how it can be all-enveloping. Instead, the 'real need' is to see the 'grammar' of the world clearly enough to make philosophical confusions disappear. To emphasize this point Finch (1977) asked; "What is the criterion for seeing phenomena rightly or for having arranged them in such a way that they show their essential aspect?" (p. 190). And he replied;

Wittgenstein's answer is that we do not need some absolutely correct way of looking (a meaningless idea in any case). We are looking for *an* order which removes our problems and enables us to find our way about. We know that we are seeing things rightly in this way when a particular philosophic problem altogether disappears ...Then we "know where we are" when we have seen the grammar correctly. (p. 190).

From this perspective it is possible to see why psychology has difficulties with reflexive issues. For psychology can be seen as an attempt to give determinate (causal) accounts of the phenomena it deals with. It is not difficult to imagine how such accounts could be assumed to meet the 'real

need' of understanding psychological phenomena clearly while in fact they could be preventing such clarity, just as the account of the phenomena of language in the *Tractatus* obscured the clarity that was really wanted by Wittgenstein.

Before looking once more at the issues of reflexivity (See Chapter 1) -this time from the point of view of the 'Late' philosophy of Wittgenstein- it will be useful to examine Wittgenstein's special type of *phenomenalism* and the concepts of *grammar* , *language-games* and *forms of life* . This will provide some terminology to help discuss the issues of reflexivity.

4.3 'LANGUAGE-GAMES' AND 'FORMS OF LIFE'

To understand Wittgenstein's (1953) approach to phenomena it is essential to be clear about the status of the concepts of 'language-games' and 'forms of life'.

In the context of the present study, perhaps the most important point to note about the terms 'language-games' and 'forms of life' is that they are *not* constructs in a theory aimed at *explaining* language. It was suggested above (Chapter --, Section --) that the *Tractatus* system also should not be thought of as a theory. However, while the system presented in the *Tractatus* could not be theoretical because what it dealt with *had to be* reality itself (T. 5.5563), language-games and forms of life are not theoretical terms because they 'come before' facts and are therefore *not themselves factual* (Finch, 1977, p. 71).

From the viewpoint of the *Tractatus* (and of the 'logical positivism of the Vienna Circle' in part inspired by the *Tractatus* -Engelmann, 1967; Hilmy, 1987, pp. 190ff.) talk of pre-factual entities would be as nonsensical as talk of propositions of logic. But when the requirement that language must have determinate sense is dropped then terms ('names') used in language do not need factual entities to validate their meaningfulness. Rather, by examining and describing the 'grammar' ('use') of an expression its meaning can be viewed clearly.

It is important to realize that to speak in terms of 'language-games' and 'forms of life' -to employ the grammar of these expressions- is just *one way*

of *speaking* . It is a way to "establish an order in our knowledge of the use of language: an order with a particular end in view; one out of many possible orders; not *the* order" (P.I. 132).

For example, to say that language-games are 'primary' or 'fundamental' or that they are "the absolute starting point" and "can neither be explained nor justified" (Finch, 1977, p. 74) is not necessarily to make an *ontological* statement about the nature of language. Instead, when it is realized that 'ontology' itself in one sense is only a part of language, then to speak of the fundamental character, etc. of language-games is simply to indicate or even to *teach* , the grammar ('use') of the term 'language-games'. As is so often the case in Wittgenstein's 'Late' philosophy the important thing is how a word is used, its grammar, rather than trying to discover what the word 'really means' or refers to ((e.g.) P.I. 116).

Language-games are also called "primitive languages" by Wittgenstein (1953, P.I. 7). Used in this way language-games are "objects of comparison" (P.I. 130, 131) that can *isolate* an aspect of language ((e.g.) see the list of language-games in P.I. 23) to shed light on the different ways in which language is used. In *this* sense language-games are 'hypothetical' or 'ideal' languages. But, this is not to say that such language-games are conceived of as fundamental 'atoms' constitutive of language. Such language-games are more like "measuring-rod[s]" with which people 'measure' language rather than representing " a preconceived idea to which reality *must* correspond" (P.I. 131).

One of the reasons Wittgenstein (1953) chose the word 'language-game ' was to bring out the fact that there is no 'essence' to what is called language just as there is no 'essence' to what is called a 'game' (P.I. 65, 66). In response to his own hypothetical interlocuter, who accuses him of deliberately avoiding the difficult questions about the essence of language by speaking of the multiplicity of language-games (P.I. 65), Wittgenstein (1953) described the different things that are called 'games' and asked what they all have in common (P.I. 66). He concluded that while there are relationships between certain games there is nothing that is common to all games. 'Games', like the phenomena of language are connected by, as Wittgenstein (1953) put it, a "family resemblance" (P.I. 67).

It is because of the lack of an essence to the term 'language-game' that there is no language-game to *explain* language-games -a comment on the

grammar of the term 'language-game' -"though there is, in philosophy itself, one of describing them" (Finch, 1977, p. 74).

To reiterate; to claim that language-games, and forms of life, are pre-ontological, is to implicitly challenge the view that language only makes sense when it refers to entities that exist in some absolute way *independently of language*. Wittgenstein's approach, then, is a type of "linguistic 'relativity theory'", an analogy he drew himself (Hilmy, 1987, p. 138-139). It is not difficult to see why the analogy is so appealing. By accepting that the speed of light was in fact a constant rather than trying to explain it away, Einstein could be said to have rotated the "axis of reference" of physics about the "fixed point" of the "real need" of physics ((c.f.) P.I. 108). And this insight was developed despite the fact that many aspects of relativity theory appear counterintuitive. Furthermore, light can be said to 'underlie', or, better, provide the medium for all observations in the same way that language can be said to provide the medium for all meaningful phenomena. That is, there is no extra-linguistic means of determining meaning.

One sense in which language-games are "primary" (P.I. 656) is that it is only the language-game that determines what counts as a 'simple' (P.I. 46ff.). A chessboard, for example, in one language-game could be 'simple' while in others it could be composite ((e.g.) black and white; 64 squares; wood, varnish and paint, etc.). Therefore, there is no privileged 'unit of meaning' that could determine the structure of *all* language.

This point emphasizes the fact that there can be no paramount language-game and certainly "the attempt to develop theories about the causes for the development of language-games can itself be no more than an additional language-game, whatever else we may imagine it to be" (Finch, 1977, p. 75).

Another sense in which language-games are fundamental is that they are an inherent part of *language as an activity*. In this respect Wittgenstein (1953) commented that, "the term 'language-game' is meant to bring into prominence the fact that the *speaking* of language is part of an activity, or a form of life" (P.I. 23). Life -or, rather, meaningful phenomena (see Section 4.5, below)- and language, through the notion of 'language-games', become intimately entwined.

There is a some disagreement in the secondary literature on Wittgenstein's 'Late' philosophy as to the relationship between 'language-games' and 'forms of life'. In particular, there are different views on the extent to which the two terms should be considered equivalent.

For example, Hilmy (1987) suggested that Wittgenstein called *language-games* 'forms of life' partly to stress the fact that language-games are "*activities* or loci of linguistic *practice* ", and that these practices "are constitutive of the meaning or 'life' of signs" (p. 184). Finch (1977), however, claimed that the idea that language-games and forms of life are the same simply does not fit in with what Wittgenstein said about them (p. 90). In support of this claim Finch (1977) argued that the same language-games can function in different forms of life and "many language-games may be united in a single form of life" (p. 92). Forms of life, then, become for Finch (1977) "units of meaningful action which are carried out together by members of a social group and which have a common meaning for the members of the group" (p. 90).

Wittgenstein (1953) used the term 'form of life' only five times in the *Philosophical Investigations* (P.I. 19, 23, 241, p. 174, p. 226). For the present purposes all that needs to be noted about these occurrences of the term 'form of life' is that in each case it is used to emphasize the inseparability of life (meaningful human activity) and language. For example; "And to imagine a language means to imagine a form of life" (P.I. 19), and, "It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life." (P.I. 241).

The expression 'form of life' and, also, the expressions 'language-games' and 'grammar' are used by Wittgenstein (1953) to emphasize the point that meaning 'comes before' facts and ontology. A form of life does not therefore *determine* a particular meaning, or even "underwrite" the meaningfulness of an activity as Baker (1984, p. 280) would have it do. If this were so all the problems of extreme relativism would be present.

In other words, if a form of life were thought to determine a meaning then it might be imagined that a different form of life could determine a different meaning. It might, therefore, seem impossible to decide between different meanings. But this is to forget that imagining this situation already involves a 'given' form of life constitutive (rather than determining) of the meanings of phenomena. The situation just never arises where it is

necessary to, as it were, choose between forms of life the way one might choose between metaphysical theories. A village green, for example, might be a cricket field or a grassy ecosystem depending on what language-games and forms of life were involved. It would be pointless to ask which of the two -or any other option- it *really* was. That is, the grammar of the term 'form of life' is such that it only applies to what is prior to epistemology - prior to what could sensibly be called 'knowledge'.

As has already been discussed in Chapter 1, Section 1.8.4, Wittgenstein's (1969) book *On Certainty* speaks of a type of certainty that is neither known not doubted but simply "stands fast" for someone (O.C. 151). And these certainties are founded not on an "ungrounded presupposition" but on an "ungrounded way of acting" (O.C. 110). That is to say, "it is our *acting* , which lies at the bottom of the language-game" (O.C. 204). The reason that action is the foundation of language-games is because of the impossibility of generalized doubt. That is, every doubt must presuppose the possibility of certainty; -or to put it more clearly, every doubt must presuppose language as a meaningful activity. Doubt is expressed in language that is meaningful so it presupposes a meaningful activity, a form of life.

Forms of life, language-games and grammar reflect the fact that even knowledge and doubt must be meaningful. As Finch (1977) put it;

Here again Wittgenstein reverses the traditional picture. It is not that we have to *know* something in order to *mean* something, but rather *our knowing too must have meaning* , and that comes first. It would not make sense to talk about knowing which was not already a way of making sense. (p. 81).

Forms of life are just those meaningful activities that allow even *knowledge* to make sense and, therefore, are simply what is accepted or given (P.I. p. 226). They are that aspect of language, understood in terms of language-games -understood, that is, in terms of the possibilities or grammar of language- that provide a 'foundation' for language in the only sense in which it could be said that language *has* a foundation.

Because of their meaningfulness forms of life are still, in one sense at least, part of language. (Wittgenstein in his 'Late' philosophy took the important

step of including *in* language such things as ostensive definition and other gestures ((e.g.) P.I. 28-36); samples or standards such as the one metre standard in Paris and colour samples -whether mental or physical- used in naming colours (P.I. 50); and facial expressions (P.I. 536-537).) It is because forms of life are already meaningful, and therefore are an aspect of language, that they cannot possibly be 'ontological' in the traditional sense of the word. That is, forms of life cannot be hypothesized realities *independent* of language.

On the other hand, forms of life are unlike other 'parts' of language in that their meaningfulness is *given* and is therefore *constitutive* of the meaning of the various concepts, criteria, etc. used in association with a particular form of life. As already mentioned, another way of saying this is that in the concept 'form of life' language and reality become indistinguishable. A brief example should illustrate this point.

'Calculating' is explicitly mentioned by Wittgenstein (1953) as a form of life (P.I. p. 225-226). Understood as a form of life, 'calculating' is a meaningful activity shared in by members of a group. One aspect of this form of life may, for this group, involve judging whether a calculation has been carried out correctly. Parts of this judging process may seem to be part of 'reality' rather than language -(e.g.) giving the calculation to another person to check, working out the calculation with pencil and paper and comparing it to the original calculation step-by-step, looking up a book that supplies all the answers to such calculations, etc..

These actions seem to exist in the 'real world'. Yet for someone who did not share the 'calculating' form of life he or she could watch, for example, a calculation being checked with pencil and paper and never see such a thing as a calculation being checked. (And, it is important to note that it would be wrong to say that the observer would at least see physical movements and, therefore, *that* is really 'reality'. For there must be a form of life constitutive of seeing, describing, etc. physical movements, otherwise it would be meaningless to say, for example, "I have just seen the arm move from the table to the head.")

Bringing together language and reality via language-games, forms of life, and grammar is perhaps the most important step taken by Wittgenstein. The separation of language and reality required the existence of a connection or 'commonality' between the two to explain how language could make

sense and be of any use in the 'real' world. But, as was discovered in the *Tractatus*, any attempt to account for this connection ended in nonsense and paradox. The issues of reflexivity discussed in this study also depend, for their problematic aspects, on this separation. The reflexive problem took the form 'How is it possible to decide which side of the separation one was, or should be, standing?' Is an account of human behaviour *behaviour* (part of 'reality') or a meaningful use of language (part of 'language')?

The answer to this question can be found in what Finch (1977) called Wittgenstein's "physiognomic phenomenalism" (pp. 168-191). But before briefly discussing this notion a major criticism of Wittgenstein's 'Late' philosophy needs to be addressed. It is a criticism that, if valid, would make Wittgenstein's philosophy as vulnerable as any other to the problems of reflexivity.

4.4 IS WITTGENSTEIN'S 'LATE' PHILOSOPHY 'EXPLANATORY'?

Hunnings (1988) stated this criticism very directly in the following terms;

Wittgenstein cannot have it both ways. If our Weltanschauungen are embedded in the grammar of our language-games then the possibility of neutral theory-free description is ruled out. In Wittgenstein's investigations of language what purports to be description turns out to be explanation, i.e. the facts filled out by the concept of grammar. The incorporation into language of activities associated with language-games, colour samples, mental events and the analogies of methods of projection, games, tools and the later picture-theory of meaning all pertain to the apparatus of explanation rather than a description of language ...The assertion that (his) philosophy only demolishes houses of cards and in no way interferes with language but leaves everything as it is, is at best tendentious and at worst nonsense (P.I. 118, 124) ...Grammar as conceived by Wittgenstein does not give us the facts but another interpretation of the facts. ...Wittgenstein once again falls victim to his own generality

and the life-long impulse to put an end to philosophy. (pp. 249-250).

To begin to counter this criticism it can first be noted that in his 'Late' philosophy far from wanting to put an end to philosophy Wittgenstein actually opposed the very possibility that there could ever be a final explanatory account of language, and therefore of the problems of philosophy (P.I. 92). The only sense in which Wittgenstein (1953) spoke of putting an end to philosophy is the following;

The real discovery is the one that makes me capable of stopping doing philosophy when I want to. -The one that gives philosophy peace, so that it is no longer tormented by questions which bring *itself* in question. - Instead, we now demonstrate a method, by examples; and the series of examples can be broken off. Problems are solved (difficulties eliminated), not a *single* problem. (P.I. 133).

Obviously, Wittgenstein (1953) is here referring to the ability to stop philosophizing in a way that produces an endless vicious circle or self-destructive outcome. Rather than being anti-philosophy Wittgenstein's desire is to free philosophy from the conceptual confusion that produces such degenerative results. Because language is not 'solvable', "once for all" (P.I. 92), the "idea of finality", as Finch (1977, p. 165) commented, can be given up, and it is *this* that gives philosophy peace. Conversely, it is the chimaera of a final solution that prevents this peace.

Finch (1977) went on to say that Wittgenstein's philosophy does not have this finality and therefore "it is not a 'construction' but simply a point of view for getting rid of 'constructions.'" (p. 165). This is the point Hunnings (1988) could not accept. It is obvious that for Hunnings (1988), terms such as 'grammar' must, at bottom, be part of an attempt to explain how language functions and, therefore, must themselves be part of a 'construction'. But 'grammar', for example, does not determine the form of language; rather it is a description of that form (P.I. 496). As such -and this is vital- it is the form of language, in the only sense in which it is possible to speak of language having a form. That is, a form that was not a description simply would not enter into language.

Hunnings' (1988) criticism is that such a description of the "facts of our language" (P.I. 130) cannot possibly be "theory-neutral". Certainly, there can be more than one description of language. But it does not therefore follow that all description is 'theory-laden'. Such a conclusion is part of the approach that always sees description as the attempt to 'say how things really are' independently of language.

This approach amounts to an attempt to explain the *essence* of description. Furthermore, it is just the sort of explanation of description Wittgenstein (1974a) employed in the *Tractatus* and later repudiated. This approach presents a dilemma, for what is *desired* is a 'theory-neutral' description of the world as it actually is but all that can be *given* are 'theory-laden' descriptions. Wittgenstein's response to this dilemma is to argue that it is a mistake to understand descriptions as *in any way* theoretical. In his terms, the grammar of the concepts 'theory' and 'description' simply do not relate in this way.

In P.I. 240-242 Wittgenstein (1953) remarked that if language is to be a means of communication there must be agreements in the judgments people make (P.I. 242) -agreement not in opinions "but in form of life" (P.I. 241). These agreements in judgments provide the *basis* for the working of language in such things as giving descriptions (P.I. 240). Descriptions of phenomena present aspects of phenomena and, as will be shown in the following section, all aspects of phenomena must have equivalent status in terms of their 'reality' or, more correctly, their meaningfulness. To see different aspects of phenomena as different *theories* about phenomena is simply to invite confusion.

From this viewpoint comes the freedom to describe phenomena in ways which dissolve particular problems. It is the clarification and dissolution of (philosophical) problems that represent "our real need" (P.I. 108) according to Wittgenstein (1953). Formulating a general problem-solving strategy such as "Find out what the world is really like" may solve *certain* problems but there is no reason to believe that *all* problems can be solved in this way. Of course, the problems associated with reflexivity are of the sort that are *generated* by this very problem-solving strategy, which is why *this* strategy cannot solve *these* problems. For the problems are all about what the world is really like.

Returning to Hunnings' (1988) criticism, the fact that more than one description of a phenomenon can be given does not imply that the phenomenon has a reality independent of any description (See Section 4.5, below). Therefore, each description simply presents the phenomenon in a possible way. And it is the possibilities of a phenomenon that are part of grammar. For example, to say that length does not have a colour or that mood has intensity or objects have mass is not to say anything about the nature of length, mood or objects as they exist independently of language. Rather, such statements are grammatical statements. In particular, they reveal grammar in its normative capacity, determining the correct and incorrect use of concepts.

So, when Hunnings (1988) stated that no description can be 'theory-free' all he was noting is that every description presents one or more aspects of a phenomenon. This is only a problem if one is searching for the 'essence' of a phenomenon, understood as that phenomenon's fixed nature. Ironically, Wittgenstein (1953) remarked that "Essence is expressed by grammar" (P.I. 371). That is, the 'essence' of a phenomenon is its possibilities. But, of course, this use of the term 'essence' is very different from the use of 'essence' as referring to a fixed nature. In fact, it is almost the opposite use since 'possibilities' refers to the variety within a phenomenon rather than to its fundamental enduring nature.

This is the point at which Hunnings' (1988) criticism can finally be rebuffed. Rather than there being a question of whether or not Wittgenstein's 'Late' philosophy is explanatory, the fact is that it *cannot* explain language (or any phenomenon). For example, to say that the statement "length has no colour" is a grammatical statement is not to say that the grammar of language *determines* or *explains* why length has no colour. It is simply like the statement of a rule in a game. In this sense, the formal sense, grammar is arbitrary. Now, to state that "Language can be described in terms of its possibilities (just as any phenomenon can be described)" likewise does not determine or explain anything about language (least of all why language has possibilities).

In this case the game that is being played involves describing language-games -or, as Wittgenstein might have called it, 'philosophy'. Investigating language in terms of its possibilities is itself just one possible way of being interested in language. To say that grammatical statements are like rules in

a game explains nothing about why the rules exist or why that game is played or even why the game has the form it does. (Rules cannot determine or explain the form of a game because rules can always be variously interpreted. Also, whether or not a rule has been followed or broken can only be given by yet more rules (P.I. 82-86).)

Once the attraction of the 'final solution' is weakened a description can receive its "purpose", "its power of illumination", from the philosophical problems (P.I. 109). Descriptions need no longer always be seen as describing a reality independent of language and, therefore, necessarily 'theory-laden' hypotheses about reality. Instead, descriptions can be seen as a rearrangement of "something that is already in plain view" (P.I. 89). This, in order to produce "just that understanding which consists in 'seeing connexions'" (P.I. 122), particularly by "finding and inventing *intermediate cases* " (P.I. 122).

Just as 'meaning' is seen by Wittgenstein in his 'Late' philosophy as coming before ontology and epistemology, thus inverting the traditional view, 'appearance' -what is in plain view- is seen as being prior to reality. Normally, of course, reality is presumed to come first and appearances are seen as secondary interpretations laid, as it were, on top of reality. However, from Wittgenstein's viewpoint philosophical problems, particularly problems of reflexivity, are clarified by investigating what is "always before one's eyes" (P.I. 129) rather than trying to appeal to something hidden beneath the phenomena.

This priority of 'appearance' over 'reality' is part of Wittgenstein's 'phenomenalism', which is the subject of the following section.

The fact that, in the final analysis, Hunnings' (1988) cannot accept terms such as 'language-games' and 'grammar' as anything but explanatory constructs, despite having a thorough knowledge of Wittgenstein's philosophy, reveals the deeply-rooted nature of the view of language Wittgenstein opposes. 'Language-games', 'grammar' and 'forms of life' explain nothing about language. They are, instead, a way of seeing language (or a way in which language 'appears' -see Section 4.5, below). In particular, they are part of a way of seeing language in terms of its possibilities.

Questions about the nature of language can make it look as though there is something to be explained -perhaps because the outward form of such

questions makes them look similar to questions about, for example, the structure of matter. Therefore, it can seem that these questions should have answers of the form of causal explanations that can be true or false, better or worse than each other, verifiable or unverifiable.

Basically, Wittgenstein's point is that explanations too must presuppose the meaningfulness of language. The terms 'language-games', etc. simply bring out the presuppositional status of meaning -and, of course, this is not an ontological but a grammatical comment on the grammar of 'meaning'.

Hunnings (1988) is not alone in seeing explanation where there is only the possibility of description. Wittgenstein, early in his career, and some of his philosophical contemporaries, such as Russell and the members of the Vienna Circle, were also misled by language into overestimating the applicability of the "'scientific' mode of reflection" (Hilmy, 1987, pp. 220-221). Wittgenstein summed up this attitude with the following comment;

What a curious attitude scientists have: 'We still don't know that; but it is knowable and it is only a matter of time before we get to know it!' As if that went without saying. (cited in Hilmy, 1987, p.220).

The danger with this attitude is that it seems possible to see every problem and every difficulty as a question of knowledge and therefore as a question of fact. And, ironically, as Hilmy (1987, pp.221-226) pointed out, it is the inability to differentiate between what is conceptual and what is factual that is at the heart of metaphysics for Wittgenstein (1980, R.P.P. 949). This is ironic because the 'scientific' current in philosophy was, of course, aimed at purging thought of metaphysics. Hilmy (1987) concluded;

Wittgenstein, therefore, far from having an emotional sympathy for metaphysics and metaphysical theology, would have included among those infamous volumes to be committed to the flames many of the tomes of those would-be 'scientific philosophers' of our era who would do the committing. (p. 225).

That is, such philosophers treated as fact, and turned into a metaphysical theory, their view of the limits of sense in language. Thus, they could claim

to be justified in disposing of all language that did not fall within the boundaries of sense. In practice, of course, this meant disposing of any propositions that were not 'scientific'.

The real irony was that philosophers such as Russell and the logical positivists wished to replace inferred entities with logical constructions yet the justification for this procedure depended on inferring the presence of logical simples -(e.g.) Russell's 'atomic propositions' and Wittgenstein's 'elementary propositions' (See Hilmy, 1988, pp. 217-218). It was always assumed that propositions could be analysed into logical simples but it was impossible to tell whether such an analysis had actually been achieved. Inferred entities in philosophy, therefore, were being used to rid science of its inferred entities.

This attempt by 'scientific philosophers' to reform language contrasts sharply with Wittgenstein's (1953) claim that philosophy "may in no way interfere with the actual use of language" and that it "leaves everything as it is" (P.I. 124). Wittgenstein's attitude in these comments reveals a respect for everyday language and the way in which it speaks about phenomena. This respect is the basis for Wittgenstein's special type of phenomenism. It is this phenomenism that will now be discussed.

4.5 WITTGENSTEIN'S PHENOMENISM

Phenomena in Wittgenstein's 'Late' philosophy are not, as a phenomenologist might understand them, subtle fleeting matters "that are hard to get hold of, the present experience that slips quickly by, or something of the kind" (P.I. 436). Nor are Wittgenstein's phenomena, as Finch (1977, p. 172) pointed out, 'sense data' or Kantian phenomena. Instead, the phenomena Wittgenstein refers to are the "phenomena of every-day" as spoken about in "ordinary language" (P.I. 436).

In *Philosophical Grammar* Wittgenstein (1974b) commented;

And here one must remember that all the phenomena that now strike us as so remarkable are the very familiar phenomena that don't surprise us in the least when they happen. They don't strike us as remarkable

until we put them in a strange light by philosophizing. (P.G. 120).

These phenomena are recognized, identified and 'seen' by people. That is to say, such phenomena are expressive or, to use Finch's (1977, p. 172) term, they have a *physiognomic* character. To see a phenomenon in this way as like a face is to see it as a picture that "tells me itself, just as a proposition, a story tells me itself" (P.G. 121). And, further;

... it is not so much as if I were comparing the object with a picture set beside it, but as if the object *coincided* with the picture. So I see only one thing, not two. (P.G. 119).

This once again establishes the priority of meaning over fact by beginning with completely meaningful phenomena instead of objects which then have meaning added to them. But this does not mean that the world is full of a dizzying array of phenomena (perhaps leading to people suffering from 'stimulus overload'). Rather, the extent to which phenomena make an impression ((e.g.) of familiarity, fear, etc.) can vary from none at all - "our wits may be completely dull" - to strong (P.G. 126).

Interestingly, Wittgenstein (1974b) linked the idea of the "impression of specific familiarity" to that of determinacy. That is, when a particular expressive phenomenon is highly familiar in a specific sense ((e.g.) his face, my black shoes, a map of France) its familiarity parallels the extent to which it could be said to have determinate form. Thus, something appearing very familiar is like "our feeling at home in what we see, in our not changing our way of looking and the like" (P.G. 126). For example, something very familiar such as an outline map of New Zealand would perhaps be hard for many New Zealanders to see as anything but a map of New Zealand. This link between Wittgenstein's phenomenism and the concept of 'determinacy' will be implicit in the concluding discussions in Chapters 5 and 6.

While a phenomenon is in one sense completely meaningful in itself since, like a picture, it "tells me something" (P.G. 121), the other side of the coin is that how it 'tells me' is by the system of language. Without the activities that constitute language phenomena have no meaningful character of their own at all (Finch, 1977, p. 191). In similar fashion a series of words or signs can seem "dead" (P.G. 124) or meaningless when examined in isolation.

Wittgenstein (1974b) indicated that the reason why an isolated proposition appears meaningless -and, therefore, not a proposition- is because what is called a 'proposition' is a "position in the game of language" (P.G. 124). And, as Wittgenstein (1974b) continued;

Isn't what misleads us the fact that I can look ever so closely at a position in a game without discovering that it is a *position in a game* ? What misleads us here is something in the grammar of the expression "position in a game". (P.G. 124).

That is, the expressiveness of propositions (and phenomena) comes from their being part of the game of language. But sometimes this is very hard to notice. Without other propositions -that are part of a meaningful form of life- a single proposition expresses nothing, and so is not really a proposition (a 'position in a game').

Therefore, expressive phenomena, in the terminology of Wittgenstein's 'Late' philosophy, are aspects of language-games and forms of life. This should not be surprising as it is consistent with Wittgenstein's insistence on the inseparability of life and language. Expressive phenomena are part of language and therefore have no independent ontological existence. As Finch (1977) concluded;

To sum up this side of Wittgenstein's philosophy: in the end the world for him is an *expressive phenomenon* (rather than for example a causal one, logical one, an organic one or an evolutionary one, etc.). And *objectivity* finally comes to mean the *acceptance of appearances*, rather than the demand for absolute objects. (p. 190).

How things appear is given by language. Which is simply to say that there is an intimate connection between the grammar of the concepts of 'expressiveness' and 'language'. Another way of saying this is that the physiognomy of the *phenomenon* of language is that of being expressive -like a face. Language is here being treated as a phenomenon like any other phenomenon rather than as a "super-phenomenon" (Finch, 1977, p. 189) within which all other phenomena become manifest.

Wittgenstein's 'physiognomic phenomenalism' thus allows language and the world to be reconciled and the weeping wound of Cartesianism to be healed. The common factor between language and the world is that they are both expressive, they both have appearances.

Closely connected to the central role Wittgenstein gives to expressiveness and appearances is his investigation of the concepts of 'seeing' and 'seeing as'. In the *Philosophical Investigations* (P.I. II, xi, p. 193ff.) Wittgenstein extensively examined and contrasts cases of 'seeing' ((e.g.) "I see this") with cases of 'seeing as'. This latter type of case is also called by Wittgenstein "noticing an aspect". For example, Wittgenstein (1953) commented;

I contemplate a face, and then suddenly notice its likeness to another. I *see* that it has not changed; and yet I see it differently. I call this experience "noticing an aspect". (P.I., II, xi, p. 193).

If two drawings of the face were made, one before and one after this likeness was noticed, they would be identical. Yet still, the face appears different after the likeness is noticed. Many examples of this phenomenon are discussed by Wittgenstein in this section of the *Philosophical Investigations* including Jastrow's drawing of an ambiguous figure that can be seen as either a duck or a rabbit and a schematic illustration of a cube that can be seen at one time as a glass cube, another time as a wire frame and yet another time as an open inverted box.

The importance of Wittgenstein's discussion of 'seeing' and 'seeing as' is twofold. Firstly, Wittgenstein (1953) linked 'seeing an aspect' with 'experiencing the meaning of a word' (P.I. II, xi, p. 214). This linkage is important since it might seem that the possibility of experiencing the meaning of a word comes into conflict with the idea that the meaning of a word is its use. Secondly, it will be argued that the concepts of 'seeing' and 'seeing as' and their interrelationships bear directly on reflexive issues.

It is not difficult to see how 'seeing an aspect' is connected to 'experiencing the meaning of a word'. For example, pronouncing the word 'till' *as a verb*, to mean it as a verb, seems to involve something different from occasions in which it is pronounced *as a noun*. Such an example seems to highlight the possibility that the meaning of a word can be 'experienced', and thus suggests that there are two distinct elements involved; the word and the

meaning that is attached to it or added on later (by means of a psychological process perhaps).

In the same way, as Seligman (1976) commented, the experience of 'seeing as' may suggest that in 'seeing' itself there are two components; the pure visual element and then the interpretation laid over top (pp. 205-206). In fact, the experience of 'seeing as' may appear to be *evidence* of just such a dual process. However, as Seligman (1976) and Finch (1977) pointed out Wittgenstein (1953) argued against understanding 'seeing as' and the phenomenon of 'experiencing the meaning of a word' in this way. This should not be surprising since if he did not argue against this view he would have to abandon the notion of the absolute primacy of meaning.

Wittgenstein (1953) argued that even in the case of 'seeing as' where it seems most appropriate to speak of two components to seeing, there is only ever one component. He pointed out that on 'seeing' a knife and fork one is not likely to say "Now I am seeing this as a knife and fork" (P.I. II, xi, p. 195). Rather, one would simply say "I see a knife and fork" and thus report a perception. However, in the case where a shift in aspect is experienced -for example with the ambiguous duck-rabbit picture- it is impossible to discover which of the aspects is most 'primitive'. That is, no aspect can be reduced to any other.

Certainly, no aspect stands as a "pure and indubitable visual experience" (Seligman, 1976, p. 206) that might be thought to underlie all aspect-seeing and, by extension, all 'normal' seeing. And attempting to explain a change in aspect in terms of private inner pictures does not help provide a basis for the difference between aspects because the idea of the 'inner picture' is modeled on that of the outer picture which, of course, does not change between aspects. Neither is it helpful to explain the differences by treating the 'organization' of a figure as a perceptual datum like colour and shape. There is no feature of a visual impression that could be pointed to as its organization and which could then be used to distinguish between the different aspects.

If the experience of seeing an aspect does not depend on there being two components to the concept of 'seeing', what does it depend on?

Wittgenstein (1953) answered this question by pointing out that only someone who has the *ability* or the *capacity* to make different applications

of a figure, someone who has 'mastered a technique' in a particular case, could have the *experience* of 'seeing as' (P.I. II, xi, p. 208). This logical condition reveals that the concept of experience used here is different from the concept of experience used when, for example, someone speaks of experiencing a toothache. "After all, you don't say that one only 'has toothache' if one is capable of doing such-and-such" (P.I. II, xi, p. 208). That is, experiencing a toothache does not depend on any ability.

The same points made about 'seeing as' can be made with regards to the phenomenon of 'experiencing the meaning of a word'. There is not a word and then the meaning added to it just as there is not a visual experience and then the interpretation added to it. Rather, just as seeing an aspect depends on the capacity to provide a visual context, so too the phenomenon of 'experiencing the meaning of a word' depends on the *capacity* to apply the word in certain ways (Seligman, 1976, pp. 216-217). Not that the word *has* to be applied -perhaps by saying it quickly to oneself- only that one *could* apply it in certain ways.

To summarize this first point about Wittgenstein's discussion of 'seeing' and 'seeing as'. The experience of 'noticing an aspect' does not provide evidence for there being two components in 'seeing'. A change in aspect does not imply that there is one visual datum being interpreted in two ways. Similarly, experiencing the meaning of a word does not imply that first there is the word and then the meaning is added. Rather, both 'experiences' imply *capacities* to apply the visual figures or the words in various ways.

What is most relevant in this argument is that the primacy of meaning is maintained in a situation where the meaningfulness of either visual experience or words seems to be separate from the underlying phenomena.

The second important feature of Wittgenstein's discussion of 'seeing' and 'seeing as' is the direct way in which it relates to the reflexive issues that are the subject of this study. It is suggested here that reflexivity is closely connected to the concept of 'seeing as' or 'aspect seeing'. It is not difficult to see how this connection can be made. The main observation made in Chapter 1 was that the various reflexive issues discussed seemed to be problematic because of the presence of two distinct and seemingly incommensurable aspects to the concept of 'meaning'.

But it is not only in this general observation that the concept of 'aspect seeing' can be recognized. Specific examples of reflexive issues in psychology provide more instances. For example, in psychology people can be seen as both 'objects and subjects' (Chapter 1, Section 1.5); theories can be seen as semantic pictures or as verbal behaviour (Chapter 1, Section 1.2); knowledge can be seen as a rational structure or as socially constructed (Chapter 1, Section 1.8); values can be seen as steering all human action, including the study of human behaviour, or as being of little interest (Chapter 1, Section 1.3).

In short, it is proposed here that the possibility of reflexivity requires 'aspect seeing'. And the problems associated with reflexivity are very similar to the problems arising when 'seeing as' is thought to involve 'seeing' plus something extra. It is by understanding that 'seeing as' is as fundamental as any other type of 'seeing' that the vicious recursive circle found in issues of reflexivity can be broken.

One example should clarify the point being made here. It is common to speak of the theory-laden nature of observations. However, when someone describes what he or she observes ('sees') it is quite natural for that person to say, for example, 'I see he is angry'. The observer has not theorized or hypothesized in saying this -which reveals part of the grammar of the concept 'seeing'. It is only when a third person says 'That person is seeing him as angry' that theorizing seems to be involved. This is because the third person is using the concept 'seeing as' and not 'seeing'.

The third person, that is, has either experienced a change in aspect him or herself when observing the original 'angry' person or is assuming that it is at least possible to see the 'angry' person in some other way. Both the use of the concept 'seeing' by the original observer and the use of the concept 'seeing as' by the third person are quite legitimate.

Confusion arises when the third person assumes that the original observer in some way theorized (perhaps 'unconsciously' or, to confuse concepts even more, 'implicitly') in making the observation. But this assumption rests on the further assumption that observation must involve two components in order to explain why the observer 'sees' one aspect and not another. The whole point of the argument above, of course, is that even in the case of 'aspect seeing' it is impossible to find two components in seeing.

Wittgenstein (1953) made the same point in terms of the many different ways in which something can be described;

And now look at all that can be meant by "description of what is seen". -But this just is what is called description of what is seen. There is not *one genuine* proper case of such description -the rest being just vague, something which awaits clarification, or which must just be swept aside as rubbish. (P.I. II, xi, p. 200).

It is misleading to think of aspect seeing as involving the "one genuine" description and various other descriptions ('interpretations'), even if it is claimed that the "one genuine" description or 'real form' is never likely to be discovered.

This latter claim seems like a final attempt to maintain belief in a reality that is prior to 'meaning'. It is a strange type of reality that only remains real so long as it is never discovered or 'seen'. (Ironically, perhaps the best way to understand such a belief is to consider it in terms of Wittgenstein's notions of 'forms of life' and 'language-games'.)

To say that observations are theory-laden is not to say that the process of observing involves two components. Surely all such a term indicates is that the consequences of observing, for example, the duck-rabbit picture as a duck differ from the consequences of observing it as a rabbit. This, of course, is a grammatical and not an ontological point -and this is how it differs from radical behaviourism which it may appear to resemble in other respects (See Chapter 5, Section 5.3.7, below for a discussion of the important differences between Wittgenstein's approach and radical behaviourism).

This example of the theory-laden nature of observations reveals the source of the problems caused by reflexivity. For, if the notion that all observations are theory-laden were applied to itself (assuming that it is itself in a sense the report of an 'observation') its 'truth', or at least its applicability in any particular situation, would be undermined. This reflexive problem is avoidable only when it is realized that two distinct and *equally fundamental* concepts are involved, that of 'seeing' and 'seeing as'. By keeping these concepts distinct the temptation to explain 'seeing' in terms of 'seeing as' by calling observations 'theory-laden' (which is to say they are at least partly

determined by theory) or, indeed, to explain 'seeing as' in terms of 'seeing' plus something else, can be resisted. In this way reflexivity never gets off the ground.

The following chapter will return to the specific issues of reflexivity discussed in earlier chapters. As well as attempting to defuse the problems caused by these particular issues, some general conclusions will be drawn regarding the study of psychology.

CHAPTER FIVE

5 SUMMARY AND CONCLUSIONS

5.1 INTRODUCTION

Just how peculiar an activity *is* psychology? It was suggested in the Introduction to this study that psychology's position in the all-enveloping endeavour to accumulate knowledge about the world makes it vulnerable to what have been termed here the 'issues of reflexivity'. That is, the naturalistic pursuit of objective knowledge that for so long has been thought to epitomize science has spiraled inwards until, in psychology, the phenomena of knowledge and thought are themselves treated as natural phenomena.

While it could be argued that other areas of study have similar reflexive problems psychology suffers uniquely from the immediacy and poignancy of the reflexive dilemma. It was only in the present century that physics, for example, found reflexive problems intruding into its empirical efforts. Even then reflexivity only became a consideration when very high speeds and very small sizes were being investigated. Furthermore, it may be true that other social scientists are more acutely aware than psychologists of such possibilities as the relativism of knowledge. However, they are, perhaps, less committed to doing full justice to psychological phenomena as aspects of the individual, a consideration that serves to tighten the reflexive loop.

In fact, in one sense it is the desire to accommodate the *individual* into a scientific psychology that accentuates and exacerbates reflexive problems. And this is true whether the accommodation is via cognitive constructs or laws of behaviour pitched at the level of the individual. For once it is assumed that there are phenomena at the level of the individual, then theories and knowledge become self-referential in a very immediate sense since they are uttered by individual people. And, of course, it is individual people who use the first-person singular pronoun, the exemplar *par excellence* of self-reference. (An analogy can be made here with the paradoxical problems Wittgenstein (1974a) found in seeing language as a set of internal relations existing between 'individual' names, and the world as relationships between 'individual', discrete objects.) Psychology, therefore, in attempting to investigate the unnerving opaqueness of the individual finds itself at the crossroads of countless dichotomies that seem to resonate throughout language and thought.

The problem for psychology can be put in the following way: Every theory of psychological phenomena is itself the product of psychological phenomena *-and nothing else*. "Nothing else" because all talk of physical, chemical, biological or social processes must, for an individualistic psychology, become just more thoughts, verbal behaviour or some such.

For centuries other sciences, and of course philosophies, have at least had the *possibility* of avoiding analogous conclusions by assigning reflexive problems to a nascent science of psychology. A psychology, perhaps, in which psychological phenomena are conceived as *emerging* from physical, biological and social phenomena. So long as psychology remained unexplored it could be used as a buffer between science and reflexivity. That is, a theory in physics could be seen as a product of physical phenomena *plus* psychological phenomena; a theory in biology a product of biological phenomena *plus* psychological phenomena, etc.. In this way physical phenomena, biological phenomena and other types of phenomena could retain their appearance as *objective* and *real* in the sense that they could be thought to exist independently of language and thought.

Only now as attempts are made to gain systematic knowledge in an area swamped by many generations worth of promisory notes has the deep-rooted nature of the problem of reflexivity become fully evident. Until recently it could be assumed without threat of challenge that knowledge

produced in the natural sciences was founded on unspecified 'psychological factors' and 'psychological processes'. It may also have been assumed that, once discovered, these factors and processes would explain and therefore validate just such knowledge. Thus, a nineteenth century physicist may well have felt assured that a scientific psychology would serve to confirm the certainty of measurements and observations. While it may be argued by some psychologists that progress has been made along these lines the present study suggests that it would be wise to treat any conviction of progress towards an enduring fund of foundational knowledge on human psychology as a product of programmatic zealotry, rather than arising from a justified confidence in the fruits of psychological research.

The suggestion, then, has been made in this study that the problem of reflexivity underlies many of the theoretical dichotomies and debates in psychology. In particular, it has been suggested that difficulties have arisen because of the presence of two competing versions of the concept of meaning: Meaning as 'reference' and meaning as 'use over time' (See Chapter 1). Further, it has been argued that this ambiguity in the concept of 'meaning' is part of a widespread and implicit view of the relationship between language, thought and the world - a view expressed most precisely in Wittgenstein's *Tractatus* where it is reflected in the distinctions made between 'meaning' and 'sense' and between what can be said and what can only be shown (See Chapter 3). Finally, it has been suggested that Wittgenstein's 'Late' philosophy reveals an approach that could dissolve the problematic aspects of such a view (See Chapter 4). All that now remains is to apply this approach to the reflexive problems in psychology.

Three ways in which reflexivity was said to enter into the theoretical process in psychology were mentioned in the Introduction (Chapter 1). These were:

- (1) Reflexivity at the level of psychology's subject matter. This includes the question of whether it is useful to conceive of people as reflexive, active agents and questions concerning the nature of perception, cognition and consciousness.
- (2) Reflexivity in the *production* of psychological theories. This includes the question of whether psychological explanations can give a coherent account

of their own production. This point is important if it is assumed that psychological processes are involved in the production of theories.

(3) Reflexivity in the *evaluation* of psychological theories. This involves the question of how to evaluate a theory if its form is a product of psychological processes.

The final discussion of these various issues will have the following structure. Firstly, a way in which the general reflexive form enters into language will be presented. Secondly, each of the issues of reflexivity in psychology mentioned in Chapters 1 and 2 will be discussed individually with the aim of dissolving their problematic nature. Finally, general conclusions will be made about psychological phenomena and about the prospects for a science of psychology that seeks to avoid reflexive problems and paradoxes.

5.2 REFLEXIVITY IN LANGUAGE

First of all it should be mentioned that many of the points in the following discussion have been foreshadowed in earlier Chapters. However, despite this there is a need to reiterate these points in an integrated and, hopefully, coherent way so that the 'reflexive form' can be clearly examined.

After the previous extended discussion of Wittgenstein's philosophy (See Chapters 3 and 4, above) it is possible to begin to understand how reflexive issues, in general, find their way into language. It is also possible to see how the seeming inevitability of the reflexive dilemma can be avoided without losing anything of 'value'.

The first point to be emphasized is that reflexive paradoxes seem to arise only when attempts are made to examine the *limits* of an assumed 'global' or 'universal' phenomenon. Given a basically Cartesian framework, thought and language are just such phenomena. In particular, if language is understood as a collection of words in which each word has an exact 'essential' meaning, then the limits of language, and to an extent thought, become the limits of meaningfulness, or 'sense'. Thus in trying to *explain* how the meaning in language and thought is constructed or generated

psychology can be seen as an attempt to draw a *limit* to language and thought and, therefore, to meaningfulness and sense. In attempting this psychology is also treating meaning as something distinct from words and sentences, something that words and sentences refer to.

Harris (1988) called this view of language "The language myth of post-Renaissance European culture" (p. 7) and linked it directly to the invention of printing. In simple terms this myth "presents languages as fixed codes which enable individuals to communicate their thoughts to one another by means of words, and portrays linguistic communities as groups of individuals who use the same language" (p. 7); and it "defines communication between human beings as thought-transference, and then postulates a social institution (the language) which makes that possible" (p. 7). Harris (1988) went on to point out;

It is essentially a language myth which ignores differences between individuals in favour of emphasizing collective conformities. In so doing it generates an internal problem of its own. Since, from the cradle to the grave, the personal linguistic history of every individual is unique, how is it possible that this rich variety of linguistic experience at the individual level should ever give rise to a common language of the kind which the myth postulates? How does linguistic unity emerge from linguistic diversity? (p. 7).

Harris (1988) believed that historically this problem was supposedly 'solved' by theorizing the existence of a "biological language machine" within people that could conveniently ensure that this diversity resulted in unity (p. 8).

But whether the language machine is a biological one or a logical one ultimately the same difficulties remain. In short, if this relationship between language and meaning is accepted or taken for granted self-reference and recursion become simple possibilities. At least at first glance, that is, it may seem possible for a statement to refer to itself since there is a meaning or thought behind and separate from the statement to act as the referent. For example, it may seem quite sensible to say, "Even the meaning of this sentence is the product of psychological processes" since it is supposedly referring to a meaning beyond the words alone. In this scheme

'meaning' is, for all intents and purposes, a factual entity generated and explained by 'psychological processes'.

However, in these circumstances paradox ensues because the meaning (or 'sense') of such a sentence seems to undermine its own meaningfulness. This undermining does not occur because, as could possibly be argued, 'psychological processes' are deterministic and therefore are incapable of generating meaning. Rather, it happens because the only method for determining the meaning (or 'sense') of such a statement -and therefore the 'reality' of the psychological processes generating such statements- is to determine the meaning of the sentence. Obviously, this is not very helpful (See Chapter 3, Section 3.2.2 on self-reference). Any meaning assigned to the sentence would necessarily be arbitrary since there is no way of comparing the assigned meaning to the actual meaning.

To complicate matters even further the attempt to determine the sense of such a sentence would undoubtedly require the use of further statements. And, presumably, these further statements would also have senses produced by psychological processes. Apart from a looming infinite regress in the determination of sense there is also the difficulty that it seems impossible to know when a theory has described the 'real' psychological processes. Since *all* language and thought are generated by these supposed processes -even the supposition that there are such processes- the claim that a theory describes them or even that it is the 'best guess' at what they are like becomes very dubious (See Chapter 3, Section 3.3.2 on the tautological nature of propositions of logic, and Chapter 3, Section 3.4 on the analogy between propositions of logic and propositions of psychology).

Ultimately, therefore, the meaning or sense of self-referential sentences is *indeterminate*. That is, self-referential sentences do not *refer* to anything meaningful. It follows then that any 'meaning' or 'sense' the sentences seem to have cannot be independent of the sentence itself. Because theories in psychology almost demand to be applied to themselves they too can appear to have an indeterminate sense.

It should not be surprising that a referential view of meaning has difficulties with self-reference. If meaning is not independent of language then a self-referential sentence cannot refer to its meaning. This is because in self-reference there is no distinction between the sentence that refers and the referent of the sentence. And separation between the referent and that

which refers would be central to most understandings of the concept of 'reference'.

This indeterminacy completes the undermining since the original world-view demanded that meaning and sense be determinate. Without this determinacy language and thought are nonsensical. The paradox, of course, is that there seems to be a class of statements, and thoughts, whose 'sense' is that they are senseless.

It is more than just coincidence that it is in the academic rather than the 'everyday' world that reflexive paradoxes are so evident. Precision of meaning is very highly prized in academic and scientific discourse. And it is the virtue of precision that has helped perpetuate the idea that all words *must*, in reality, have precise meanings and all sentences *must* have precise senses.

Unfortunately it is far too easy for a virtue to become a necessity (See Chapter 3, Section 3.2.1, above). To say that something ultimately does not have an exact meaning is, according to this view, equivalent to banishing the phenomenon to the realm of nonsense and unreality. That is, if the meaning of something is not determinate and exact it cannot be referring to anything. Since there *are* real phenomena that can be referred to there *must be* exact sense. Yet the problem then emerges that to claim in a philosophical or psychological theory of 'meaning' that 'meaning' itself has a precise meaning hidden behind and distinct from the word -a meaning that the theory supposedly describes- is, paradoxically, to banish 'meaning', and the theory, to the same exile. This was Wittgenstein's conclusion in the *Tractatus* concerning his own 'theory'. The arguments leading to the two conclusions are essentially the same (See Chapter 3, Section 3.3, above).

To summarize, there are at least three conditions necessary for the production of reflexive paradoxes. They are:

- (1) The examination of a 'universal' phenomenon that in some way ((e.g.) causally, logically) is thought to underlie the examination itself.
- (2) A view of language in which words and sentences refer to meanings that are hidden 'behind' them.

(3) Connected with (2), the belief that words have *exact* meanings and sentences have *exact* senses. Here, 'exact' means just *one* determinate meaning or sense

Given these conditions, the act of self-reference seems to draw a limit to what can be meaningfully said about such a universal phenomenon. When something ((e.g.) a statement; a theory; a person) in or through language refers to itself, conditions (2) and (3) become mutually incompatible. Specifically, if meanings are entities that are separate from but hidden behind words (2) then, given self-reference, it is impossible that 'meaning' can have an exact meaning (3) for the reasons just discussed above. Therefore, if 'meaning' has no exact meaning talk of the exact meanings of other words (3) becomes meaningless. This is because the sense of such sentences would necessarily be indeterminate if there was a word ('meaning') in them that did not have an exact meaning.

Where meaningfulness is considered to depend on the separation of language and what it refers to (meaning as 'reference'), meaningfulness must disappear when language refers to itself since there is no separation between language and itself. The final irony is that this criticism only has force because it employs the same view of language that produces the paradox. That is, the word 'language' is thought to refer to *exactly* the same thing as the word 'itself' which is only possible if they both refer to something exact. Therefore, given the view of language assumed here the criticism is as senseless as the language it criticizes

What will now be argued is that nothing is lost by abandoning this entire view of language and meaning. Nothing, that is, but paradox.

Ironically, in order to understand language as a 'universal' phenomenon the view of language and meaning just discussed had to *limit* language. That is, language had to be limited to that which has logical form and therefore makes sense. Everything outside that limit had to be nonsense and therefore not language. However, by limiting a 'universal' phenomenon the germ-seed of paradox is planted. It is suggested here, in line with the 'Late' philosophy of Wittgenstein, that, rather than limiting it, a far better way of understanding and appreciating the universal aspect of a phenomenon is to *investigate its possibilities* .

Because 'possibility' is an inclusive concept rather than a proscriptive one it does not exclude the possibility that, for example, language is sometimes like a referential system. And it certainly does not deny the *legitimacy* of using language referentially. What it does deny is the conclusion that reference is the *only* way that language operates. In the terminology of Wittgenstein's 'Late' philosophy it is, for example, possible to imagine a language-game in which one person asks another what particular words name. And if, in this game, it was asked what the word 'meaning' referred to the answer may well be "'Meaning' refers to the type of thing that *all* words refer to -and you either understand what I mean or you don't", or even, "At the moment we aren't sure but we are trying to find out." The reply to the 'answer' could be "But that tells me nothing!", or perhaps "Oh, I see what you mean." Whatever the form of such a language-game the point to note is that it is described in terms of the possible ways of talking about the phenomenon. This contrasts with the view that philosophy, or psychology, should provide a final exact answer to the question of what 'meaning' refers to.

All that is lost in examining the possibilities of phenomena is the idea that what is *needed* is a final account of phenomena. In fact, the possibility that humans may arrive at a final account of phenomena is not excluded by an examination of possibilities. However, such an account would be understood as part of the grammar of a particular language-game in which a final account is an acceptable possibility. And to say this is simply to make a comment on the grammar of the language-game that might be called 'examining the possibilities of phenomena.'

It could be argued that in putting 'possibility' first one thing that is lost is 'knowledge'. Since there are always other possible ways of determining what counts as knowledge it may seem that there is no *real* knowledge at all. However, the approach being recommended here does not amount to claiming that knowledge is arbitrary or even relative. In fact, because this approach does not distinguish between phenomena and language (See Chapter 4, Sections 4.3 and 4.5) *real* knowledge is just what is given by the grammar of the word 'knowledge' in particular language-games. It is not as if each language-game presents an *hypothesis* concerning what counts as knowledge while 'real' knowledge hides in some transcendental world above and beyond language. If knowledge is being talked about then it is being talked about in a language-game.

New language-games can, of course, always arise but the mistake is to imagine that since the word 'knowledge' occurs in more than one language-game that must mean that there is something (called 'knowledge') that is common to all instances of the use of the word. To imagine this is to forget that even this imagining occurs in a language-game. (And once again it should be remembered that to say that 'even this imagining occurs in a language-game' is to comment on the grammar of the concept of a 'language-game' and is not meant as an assertion of ontological 'fact'. Language-games have this grammar in order to clear away philosophical confusion surrounding the universal or paradigmatic aspect of language.)

For similar reasons it would also be wrong to think that there is something called knowledge that is somehow 'relative' to the language-game in which it is mentioned. To think this is to succumb again to the temptation to build a theory about an overarching 'super-concept' of knowledge that is supposed to be common to all the various uses, in different language-games, of the word 'knowledge'. That is, to say knowledge is relative is already part of a language-game that has a grammar for the concept of 'knowledge' and it would be a misunderstanding to treat this language-game and its grammar as pre-eminent. Language-games are not arranged hierarchically -which is why there is no language-game to explain language-games (See Chapter 4, Section 4.3). Of course, this is not to suggest that the language-game in which talk of the relativism of knowledge occurs should be outlawed. Rather, it is simply suggested that to avoid the philosophical confusion of paradox it is best to understand talk of the relativism of knowledge as a language-game and not to treat it as a theory of, or guess at, what knowledge *really is* in some absolute sense.

This approach insists that what counts as knowledge is inseparable from the grammar of the word 'knowledge' in any situation. There are no criteria for knowledge outside of particular language-games. There is, therefore, no transcendental 'knowledge', independent of language, that could be called 'real' knowledge, since even talk of transcendental knowledge must have a grammar.

This approach loses nothing because 'knowledge', or anything else, that does not have a grammar simply does not enter into language or life. And it is nowhere else 'waiting' to enter since, once again, even 'waiting outside' has a grammar and, therefore, a meaning.

Instead of losing anything this approach to reflexivity in language actually adds something. It brings back into view the ordinary, 'everyday' situations and contexts -understood in terms of language-games and forms of life- that give rise to paradoxes. It is the loss from sight of these situations and contexts that infuses paradoxes with their mesmeric quality.

5.3 REFLEXIVITY IN PSYCHOLOGY

5.3.1 REFLEXIVITY AND THEORETICAL UNITY IN PSYCHOLOGY

5.3.1.1 Discussion

If the debate outlined in Chapter 1, Section 1.2 is representative of the thinking of psychologists then theoretical unity in psychology will certainly remain elusive. Since even the desirability of unity was found to be debatable it is possible that some psychologists would actively work to prevent one approach from monopolizing psychology. But irrespective of the *desirability* of unity there remains the philosophical question of whether it is possible to *compare* psychological theories without presupposing a particular theory. It is the difficulty of making such comparisons that stands in the way of unity.

In Chapter 3, Section 3.4 it was argued that a strong analogy could be drawn between the propositions of logic as understood in the *Tractatus* and the propositions of psychology. In particular it was suggested that the propositions of psychology might lack sense in the same way that propositions of logic were found to lack sense in the *Tractatus*. So, trying to compare psychological theories with each other would amount to comparing nonsense with nonsense. Therefore, it was concluded that given the Tractarian view of language the question of unity is itself ultimately nonsensical (Chapter 3, Section 3.4.2).

However, it will now be argued that unity in psychology is both sensible and achievable. Such unity, though, does not depend on choosing the 'best' method to use in studying psychology or the 'best' picture of what people are

like. Attempting to make choices in this way simply shifts the problem from that of choosing the best theory to choosing the best criteria for theory selection. Instead, unity is to be found by seeing psychology as an exploration of possibilities. This view will now be described in detail.

As just pointed out, unity is problematic in psychology because of the difficulty of agreeing on criteria for measuring and comparing the worth of particular theories. Obviously this lack of agreement is connected to the question of which values are appropriate for psychology and what role they should play -the topic of the next section. But it is also a question of the *rational* unity of theories insofar as they can be *understood* as part of the same overall activity. This is a philosophical question and the problem underlying the question has been the general confusion and paradox promulgated by the type of philosophy repudiated by Wittgenstein (See Chapters 3 and 4, above).

If psychology is to be free of the paradoxes and solipsisms of traditional philosophy its theories can no longer be understood in traditional terms as autonomous groups of propositions that attempt to give precise (or imprecise) causal explanations of universal phenomena. That is, the idea that it is possible for a theory to be a self-contained picture of the world must be abandoned. Theories or explanations can no longer be considered in isolation from the *grammatical* contexts in which they arise.

It must be emphasized that it is the grammatical context that needs understanding and not, for example, the 'social' or 'cultural' context. While social and cultural contexts are no doubt important in *explaining* why a particular theory -or theorizing itself- arose and was developed they do not help in understanding theories in a non-paradoxical way. This is because explanations involving descriptions of social and cultural contexts are themselves theoretical and therefore can be construed in the same paradoxical ways as psychological theories.

The fundamental suggestion of this section, then, is that
*theories in psychology should be understood as
 language-games .*

Sometimes a theory may best be seen as an inter-related *set* of language-games instead of just one. There is no need to discuss here the different circumstances in which 'theories' can be thought of as one or several

language-games. But what is important to realize is that in understanding theories as, in some sense, language-games paradox is avoided. As language-games each theory has a grammar that specifies what is and is not a 'move' in the game and thus provides the appropriate context in which the theory is meaningful. Also, language-games are grounded in the activities that go to constitute a form of life rather than in metaphysical assumptions. Therefore there is no infinite regress of the type that can occur when attempts are made to *justify* a theory. (This is similar to the way in which radical behaviourism avoids the same infinite regress -See Chapter 2, Section 2.5.4, above- but there are important differences as will be discussed in Section 5.3.7, below.)

And as language-games theories are 'pre-ontological' and 'pre-factual' which means that their form is only restricted by grammar -the possible ways of speaking about a phenomenon- and not by any explicitly stated rule or claim about the nature of the world. There are, therefore, no 'artificial' restrictions on the way phenomena can be understood. This in turn provides a sensible way of understanding how creative and original developments can occur in theory construction. "Something new (spontaneous, 'specific')", Wittgenstein (1953) said, "is always a language-game." (P.I. II, xi, p. 224). It is new ways of speaking and seeing that come *first*, and these then lead to changes in concepts and in the meanings of words. New language-games, and thus new theories, are like the discovery of previously unnoticed grammatical possibilities. As Wittgenstein (1953) put it;

We remain unconscious of the prodigious diversity of all the everyday language-games because the clothing of our language makes everything alike. (P.I. II, xi, p. 224).

(Reference to being unconscious is, of course, just a way of speaking and is not a psychological explanation of how language-games are formed. There can be no language-game for explaining language-games since explanation must itself presuppose language-games (Finch, 1977, p. 74).)

These comments obviously have implications for understanding creativity. But for now all that need be emphasized is that viewing theories in psychology as language-games leaves theorizing forever open-ended -thus avoiding the paradox of final dogma- but not, therefore, unjustified. For as

language-games theories are in no need of justification but simply provide the grammar for a particular activity. And the 'rules' of this grammar determine what is correct and incorrect in a conventional sense including what is called 'obeying the rules'.

However, despite similarities this view contrasts markedly with the pluralism promoted by Dixon (1983) (See Chapter 1, Section 1.2). There is no indication that Dixon (1983) sees theories in any other way than the way just repudiated. For example, he speaks about "theoretical renderings" of "dynamic, interdependent, and multidimensional" psychological phenomena (p. 337). These remarks suggest that the distinction between language ('theory') and phenomena -here considered so problematic- is still present for Dixon (1983). And the faith Dixon (1983) put in a critical realist ontology seems to confirm this. Viewing psychological theories as language-games allows for possible changes to theory and for the emergence of new theories -which presumably was the reason Dixon (1983) supported pluralism- but without succumbing to paradox.

Just as the aims of pluralism are achieved by this approach without ending in paradox, so too the concerns of those such as Kantor (1984a; 1984b) can be met without psychology becoming a "single-theory science" (Dixon, 1983, p. 338). For example, the fear that disunity results from the "specter of psychism" (Observer, 1982), "animism" and "spiritistic" philosophy (Kantor, 1984a, pp. 69,70) can be allayed. This is because, as language-games, theories do not need to be seen as making metaphysical claims even if they explicitly assert such claims. Only if psychological theories were viewed in traditional terms would such fears be justified.

The same point was made by Costall (1980) when he commented that "paradoxically, whereas behaviorists tend to view psychological terms as theoretical constructs, Wittgenstein saw a more direct grounding in behavior, and an end to further questions" (p. 130). In other words Costall (1980) was saying that behaviourists make the mistake of treating psychological constructs in traditional terms as part of theories about phenomena that are independent of language. This contrasts with Wittgenstein's view that psychological terms are used in language-games and are grounded in the activities that constitute such games.

An interesting point is reached when it is part of the rules of a language-game not to treat human language and activity as language-games but

instead to see them both in 'traditional' psychological terms. That is, in order to play a particular language-game it may be that language has to be treated as essentially referential and human activity treated as ultimately resulting from psychological processes. It might then appear that there is no way of deciding which of the language-games -the 'traditional' or the 'new'- should be played since there is no pre-eminent language-game.

This, of course, is the original paradox and the root of the debate over theoretical unity. But this time it is expressed in terms of language-games. However, what is being forgotten here is that the 'new' language-game, which involves treating theories as language-games, is not concerned with determining what language is really like. It simply shows one possible way of talking about language without falling into paradox. And, most importantly, such a language-game is played not because it has been found to be the 'best' way of understanding language but *because it avoids paradox*. That is, there is a *context* within which the 'choice' between language-games is made.

There is no *guarantee* that choosing to see theories as language-games will in the future be seen as a 'good move'. All that can be said is that deciding whether or not it was the best choice will depend on the 'rules' of the language-game being used to make the judgement and not on the 'true' form of objective reality. And, of course, such 'rules' can always be applied in more than one way.

However, if it is assumed that paradox is undesirable in a theory then there is *some* reason to believe that psychological theories which encourage a paradoxical world-view, once 'exposed', will not be popular. Of course, a theory which is 'at heart' paradoxical may still be of value and of use in some sense. Nevertheless, what such a theory *cannot* provide is a clear way of understanding meaningful human action. Therefore, if what is sought is a pragmatic goal such as the control of human behaviour or the development of computer programs that mimic human action the paradoxical aspects of a theory may never be of concern. But when a broader goal is desired -such as the development of an overall understanding of human action- limited, 'pragmatic' theories only serve to confuse and lead to paradox.

There are three circumstances in which understanding theories as language-games avoids reflexive paradoxes.

(1) The first occurs when theories in psychology tend towards 'global theories' (Hooker, 1975), 'paradigms' (Kuhn, 1962) or descriptions of supposed universal phenomena (See Section 5.2, above).

(2) The second circumstance is when psychological theories are claimed to be descriptions or explanations of psychological *reality*.

(3) Finally, the third situation arises when a particular theory is claimed to be the 'best' way to think about or perform psychology.

What should be noted is that all three situations concern the way in which psychological theories are understood and *not* the content of particular theories.

However, the point is not that psychologists should stop talking about their theories in these ways. Rather, this approach is just a way of *understanding* such talk without falling into the paradox of the 'reflexive trap'. In fact, it is often perfectly appropriate to speak of the 'best' theory, or to say that explanations are concerned with 'real' psychological phenomena. That is, often these words are the 'best' tools to use in a language-game, so to speak. Paradox only occurs when terms such as 'best' or 'real' are removed from their 'natural' contexts and instead are, for example, thought to refer to an entirely independent way of judging theories or to a reality entirely independent of language. If, in these circumstances, psychological theories are not understood as language-games they will soon fall into the 'reflexive trap'. Once in the trap unity is easily lost.

Conversely, unity of a sort can be found once psychological theories *are* seen as language-games. Specifically, psychology can be understood as a unified collection of language-games each of which emphasizes and explores the different grammatical possibilities of various psychological phenomena. In the final section of this chapter a view of psychological phenomena that is based on this approach will be outlined in more detail. However, in the following discussion only the aspects of this approach that promote unity will be mentioned.

(1) When psychological theories approach 'global' or 'paradigm' status they can appear to be incommensurable with other theories. However, when all theories are seen as language-games they *can* be compared with each other in terms of their grammars. Carefully examining and describing the grammar of language-games can help reveal points of contrast and similarity.

Of course, Wittgenstein himself carried out just this sort of examination in his 'Late' philosophy. A good example of this activity has already been discussed above where Wittgenstein's (1953) examination of the 'experience' of 'seeing an aspect' (P.I. II, xi, p. 208) was discussed (Chapter 4, Section 4.5). Experiencing a change in aspect, it will be remembered, has as a logical condition the mastery of a technique. However, this is not the case with other types of 'experience' such as experiencing a toothache. Thus, a grammatical difference in the use of the concept 'experience' is discovered that helps to clarify why the same word can be used in markedly different contexts

In a similar way a grammatical investigation of, for example, the concept of 'language' would help reveal why it is amenable to a behavioural explanation in some ways and in other ways to a cognitive explanation.

(2) Because of the grammar of the word 'language-game' it is impossible that theories understood as language-games could have anything to say about a reality that transcends language-games. Such a reality would only be meaningful in the context of a particular language-game. Thus, very simply, psychological theories cannot be about psychological 'reality'. Therefore, all the paradoxical problems associated with seeing theories as hypotheses about 'reality' are avoided. A theory's worth is not checked against reality but against what is grammatically possible, which leads to point (3).

(3) Debates that concern which of several competing theories is the 'best' would cease completely if theories were viewed as language-games. Since language-games come complete with grammars that specify in a conventional way correct and incorrect uses of terms the only sense to the claim that a particular theory is the 'best' would be found in the language-game involved in making the judgement. This means that the 'best' theory would be the one that satisfied the criteria used in that game. However, this does not invite relativism into theory assessment. Rather, it highlights the fact that there is always a *context* within which judgements are made. And

it is important to understand this context, or language-game, in order to understand the reason why a judgement is being made in a particular situation.

Once attention is drawn to the context and *reason* for making a judgement, it becomes possible to avoid the ultimately dissatisfying infinite regress that is an inevitable by-product of the vain attempt to discover universally acceptable criteria for theory assessment. Therefore, debates that centre on finding such a set of criteria become redundant and are replaced by investigations that clarify what is 'desired' from the act of theorizing. The word 'desired' is used here to emphasize that these investigations would not be attempts to characterize the 'function' of theorizing. What is definitely not needed is another theory, this time about a function that exists independently of language. In contrast there is no sense in speaking about having a 'theory' of what one desires. Wittgenstein (1953) made a similar point when he claimed that;

It can't be said of me at all (except perhaps as a joke) that I *know* I am in pain. What is it supposed to mean -except perhaps that I *am* in pain? (P.I. 246).

Just as having a pain is not a case of 'knowing' so too having a desire is not a case of theorizing. In the 'final analysis' they are both instances of human *action*. And this, of course, is a grammatical point.

This emphasis on the purpose and context of theorizing in a particular situation leads on naturally to the question of the role of values in psychology, which is the topic of the next section. But first, concluding comments will be made about unity in psychology.

5.3.1.2 Conclusion: Reflexivity and Theoretical Unity in Psychology

The purpose of this discussion has not been to predict whether or not one theory will come to dominate theoretical psychology. No doubt many social, cultural and economic factors bear on the popularity of any approach and therefore on its prospects for domination. Rather, the question addressed has been whether theoretical unity is possible from a logical and intellectual viewpoint.

It has been concluded here that unity is *not* possible so long as theories are viewed as explanations or descriptions of phenomena that are independent of language. However, what *is* possible is unity at the philosophical level. This unity is based on seeing theories as language-games. In their aspect as language-games theories, on the one hand, have no prospect of being misunderstood as privileged accounts of reality, and, on the other hand, do not descend into relativism.

Much of the theoretical disunity found in psychology can be placed at the door of 'traditional' philosophy. In particular, that form of philosophy that can be traced back to Descartes and which has for the most part maintained implicit, and sometimes explicit, links with the world of science. By abandoning this type of philosophizing, and adopting instead the approach that has here been associated with Wittgenstein, the 'cause' of disunity is removed.

The twin fears of dogmatism and relativism, equally abhorrent in the eyes of traditional philosophy, allow for two equally defensible -or indefensible- viewpoints. This perhaps explains why many people immersed in this world view advocate some compromise position in the middle of the continuum -as far away from the two aversive stimuli as it is possible to get. In contrast, as argued in Chapter 4, Section 4.3, above and, briefly, in this section, the Wittgenstein-inspired approach put forward here avoids this continuum altogether. That is, if the idea of the language-game is understood properly, it is impossible to treat a language-game either as dogma or as completely arbitrary. Hopefully, by allaying both fears this approach will be acceptable to pluralists and 'unificationists'.

Clearly, the more a theory relies for intellectual support on traditional philosophy the less likely it is that a theorist assuming the perspective advocated here will feel comfortable in accepting and working within such a theory. The task of systematically sorting through the various theories in psychology from this perspective has not been attempted in this study. However, others, such as Heil (1981) and Williams (1985), have examined cognitive psychology in the light of some of Wittgenstein's arguments. Heil (1981) argued that any representational theory based on the assumption that internal states can act as representations *in their own right* rests on a mistake. Williams (1985) suggested that Wittgenstein considered it impossible for there to be such a thing as a cognitive science and, further,

that cognitivists such as Fodor and Stich have essentially conceded Wittgenstein's arguments for this conclusion without actually accepting the conclusion itself.

Some of the points made by these authors will be considered in the sections to come. Also, in Section 5.3.7, below, radical behaviourism will be examined to see if it fares any better than cognitive psychology from the present perspective.

For the moment all that needs to be noted is that it is not only cognitive psychology that needs completely rethinking. In fact, as may already have been suspected, the suggestion that psychological theories should be understood as language-games heralds an even greater conceptual shift. Without wanting to pre-empt the arguments of the following sections it can finally be concluded that unity *is* possible in psychology -but only by radically changing the way scientific activity and psychology itself is understood.

5.3.2 REFLEXIVITY AND VALUES IN PSYCHOLOGY

5.3.2.1 Discussion

In Chapter 1, Section 1.3 it was remarked that there is a tendency within psychology and science in general to treat values as subjective and relative. It was also said that, taken to the extreme, this tendency left psychologists with two contrasting options. Either values could be 'ignored' by promoting such values as objectivity, observation and precise measurement, or values could be incorporated into psychology by, for example, viewing people as reflexive, active agents.

Furthermore, when examined from the viewpoint of the *Tractatus* it was found that any values that could be 'said' must be part of the world and, therefore, part of what is accidental and without value (See Chapter 3, Section 3.4.3). It was concluded that any *real* value must ultimately belong to what is beyond words; the 'mystical'.

It should be noted that the tendency to relativize values is part of the view of language adopted in extreme form in the *Tractatus*. That is, calling values 'accidental' is the same as calling them relative or subjective. However, there is at least one remaining difference between the Tractarian

position and the perspective of those debating the role of values in psychology. The difference is that while Wittgenstein saw values as part of what is mystical and beyond the world, psychologists have tended to argue over whether values exist in the world.

It seems that for psychologists and scientists in general if values are not in the world they are at best irrelevant and at worst illusory. This attitude would explain why those arguing for the retention of values want to see them incorporated into psychological constructions of the subject. Placing values outside the world in the 'mystical' would probably be seen as conspiring with those who wish to ignore values. So, in order to defend values it is simply insisted that they become a *real* element in theory. Once *in* the world they have to be taken seriously.

It is interesting that in his 'Late' philosophy Wittgenstein made no mention of the 'mystical'. This is not because Wittgenstein no longer saw values as important or interesting. Rather, it is suggested here that the fact that Wittgenstein did not treat values as an object of analysis signifies an even *greater* respect for their importance than was found in the *Tractatus*. Ethics, for Wittgenstein, is "completely immanent in the philosophy (or in the human situation seen from that point of view) and, therefore, does not have to be given a special place." (Finch, 1977, p. 217).

Values are so embedded in the approach being recommended here that their position is unassailable. While psychologists subjectivize values and the *Tractatus* could find no place for them in the world the present perspective based on Wittgenstein's 'Late' philosophy sees human action as inevitably ethical and 'founded' on ethical valuations. To understand how this is possible it should be remembered that human actions -language-games and forms of life- are in the final analysis *groundless*. This is a very important point in terms of values and ethics since it means that no action is justified or determined by something external to the action itself. That is, action is not determined by "ideas (or ideologies), nature, causality, reason, will, or, indeed, any authority or external standard understood as a determinant of value" (Finch, 1977, p. 218).

Once it is realized just how groundless actions are then all responsibility devolves onto the individual. There is, as it were, nothing for the individual to hide behind. There is no rationality, natural order, causality, divine commandment or even personal will that can justify -or indeed be

blamed for- a particular course of action. All of these things are simply more language-games and cannot therefore be explanations of how human actions are determined (See Chapter 4, Section 4.4). The individual is left, so to say, completely alone and unaided.

Alone, the individual is left to make the ultimate and awesome ethical decision: whether to allow or not to allow a particular course of action. This decision involves a "taking of sides" (Finch, 1977, p. 217). And it is a decision that can have no justification but must simply be lived out. Just as life and language are inseparable in Wittgenstein's 'Late' philosophy so too are life and the ethical. It is interesting to note in this regard that Libet (1985) concluded in his neurophysiologically based account of volition that the conscious will acts to *permit* rather than *initiate* voluntary acts.

Two points need to be clarified before continuing.

(1) To say that responsibility devolves onto the individual does not mean that a view of humans as active agents is being condoned. The term 'individual' does not here refer to a psychological organism or 'ego'. Humans are not the *source* of action in any remotely psychological sense. Action, as has already been emphasized, is groundless, uncaused and undetermined. The only role for individuals is to allow or not to allow an action. To use Finch's (1977) phrase, the freedom available here is "a certain kind of response to the sources of action" (p. 218).

(2) Interestingly, although the approach described here leaves the responsibility firmly on the shoulders of the individual this in no way implies that individuals can be ultimately condemned or blamed for their actions. This is because the *act* of blaming or condemning is itself, as an act, ultimately ethical and therefore unfounded.

So, from this perspective there is no way that valuing ('ethics') can be dismissed as irrelevant. It is implicit in the groundlessness of human action. Therefore, insofar as psychology is part of human activity values are important to it.

At the finer grain the question remains as to *what* should be valued. And obviously this question is relevant to determining what values psychologists should value. In answer to these questions the present approach suggests that what is to be valued will be found in the grammar of the language-game being played. More specifically, it will be connected to the 'point' or 'purpose' of the language-game. Of course, it is important to realize that this 'purpose' is not something like a psychological intention. It is an aspect of grammar and cannot, therefore, be treated as if it were a fact since grammar is 'pre-factual' (See Chapter 4, Section 4.3).

In this respect it is interesting to note that while Wittgenstein (1953) did not speak explicitly about values, on several occasions he mentioned the aims and purposes of his own investigations and philosophy in general ((e.g.) P.I. 109, 127, 132, 133, 309). It is clear from almost any account of Wittgenstein's life that his philosophical aims and those things he struggled for and defended in philosophy reflected very closely his values as an individual ((e.g.) See Engelmann, 1967; Hilmy, 1987).

Therefore, if values are related to the language-game being played, and theories in psychology are like language-games, it may seem that values are relative to the theory being used.

But from the present point of view this is not quite the end of the story. For if the aim or purpose of a language-game reflects its values it should be possible to achieve greater agreement on values by agreeing on the aim or purpose of an activity. It is suggested here that the reason why there appears to be two different 'cultures' in psychology (Kimble, 1984) is not due so much to the fact that the two cultures possess incommensurable sets of values. Rather, it is due to the fact that there has been little discussion about the purpose or aim of studying psychology. And this lack of discussion may, perhaps, have been encouraged by the assumption that psychology involved studying 'real' phenomena that are available for all to see -and therefore can be studied for their own sake.

By understanding theories in psychology as language-games the aims of the 'humanistic' culture can in some measure be met without abandoning the aims of the 'scientific' culture. The holistic understanding of human action as essentially free and active that is desired by the humanistic culture is reflected in the concepts of 'grammar', 'language-games' and 'forms of life' and is guaranteed in the idea of the groundlessness of action. In fact, such

freedom is even more embedded in the present approach than in the humanistic approach. This is because freedom does not depend on the positing of a Cartesian theoretical construct termed the 'ego' or the 'human subject'. That is, freedom is so fundamental that it cannot even be restricted to the possession of a psychological organism. Also, many of the humanistic values mentioned by Kimble (1984), such as the importance of intuition and field study, could be seen as part of an investigation of the grammar of human action.

On the other hand the values of the scientific culture are not denied (Kimble, 1984). However, what is denied is that there is no *limit* to the usefulness and appropriateness of these values. For example, the pursuit of universal nomothetic laws and elementistic-atomistic-analysis (Kimble, 1984) was clearly circumscribed in the *Tractatus* (See Chapter 4, Section 4.1 on the difficulties of seeking exactness and determinate sense). And in fact it was the lessons drawn from the *Tractatus* about the general applicability of such values that prompted Wittgenstein's shift in his 'Late' philosophy. So, while the values of a scientific culture are not denied the *aim* -perhaps held by some psychologists- of complete exactness and completely universal laws is denied.

These limits on the applicability of scientific values indicate, therefore, the limits of a scientific psychology. Also indicated by these limits are the types of questions that need to be answered grammatically rather than causally. And the hallmark of these answers, of course, will be conceptual clarity rather than the conceptual confusion that arises from the search for exactness. So-called scientific values are not, therefore, being replaced by something subjective and vague as might be the fear. Questions that can still be dealt with sensibly in a scientific way can be answered scientifically. However, it may be surprising to discover just how few questions that are of interest to psychologists can be answered 'scientifically'.

Although the above discussion has been very brief it has hopefully shown that from the present perspective humanistic and scientific values do not need to be in conflict. But this accommodation is only possible if there is an awareness of the *aims* of research. In particular, psychologists need to think clearly about what questions they are really trying to answer in doing psychology. And if the questions are found to be grammatical rather than causal the 'answers' should be understood grammatically rather than

factually. That is, they should be understood as part of an investigation into the actual and possible uses of words and not as the description of phenomena that are independent of language.

In the natural sciences the two aims of understanding phenomena and using that understanding to develop a technology were for centuries both satisfied by the same methodology. This is epitomized by Lord Kelvin's remark that he could only ever *understand* a phenomenon if he was able to *make a machine* that could produce the phenomenon (Harris 1988, p. 15). The difficulty for psychology is that the understanding that is often desired is just the type of understanding that a mechanistic or, *a fortiori*, deterministic account cannot give. That is, ultimately a causal account of psychological phenomena does not provide a clear understanding that is free from the problems of reflexivity.

5.3.2.2 Conclusion: Reflexivity and Values in Psychology

Far from being considered arbitrary and subjective it has been argued here that values and ethics are an integral and unavoidable feature of human action. This is because all action is groundless in that it is not determined by any 'outside' influence such as causality, reason or nature. Therefore, allowing or not allowing an act to occur is ultimately based on an ethical valuation whose 'rightness' cannot be shown to be founded on anything external to the act.

It has been suggested that deciding what *particular* set of values ((e.g.) 'humanistic' or 'scientific') psychology should adopt, depends on identifying the aims of research and study. Without this understanding any attempt to select values for research will be confused and open to accusations of arbitrariness. If the aims are not clear and agreed upon it becomes possible for different psychologists to be playing different language-games, so to speak. For example, in the natural sciences the twin aims of 'gaining a clear understanding of phenomena' and 'understanding phenomena in a causal/mechanistic way' are both achieved through causal explanation. However, often the questions asked about psychological phenomena are not causal but grammatical. Only by realizing that there are two aims -that is, gaining a causal/mechanistic understanding and gaining a clear non-paradoxical understanding of phenomena- is it possible to

understand why different sets of values exist. (A special case is that of behaviourism which will be discussed in Section 5.3.7, below.)

A subtle yet vital point is that aims must be expressed in terms of what individual psychologists *value* if a debate over aims is to help psychologists determine appropriate values for psychology. For example, the supposed aim of 'discovering what the world is really like' can appear, in one sense, to be the ultimate in value-free goals. But it leads only to fruitless argument because there is no way of determining reality that is independent of so-called 'subjective' features such as values. In fact, it is because this aim is expressed in what masquerade as value-neutral terms that notions such as the relativism of values and, even more strongly, the illusory nature of values, tend to gain credence.

Therefore, it would be far more constructive and helpful -although admittedly unlikely- for individual psychologists to express what value they see in 'discovering what the world is really like'. For instance, a psychologist may aim to 'discover what the world is really like' *in order to* 'see the truth' about life and his or her role in it so as to gain peace of mind. Alternatively, and less charitably, another psychologist may have the same aim but *in order to* win theoretical debates and therefore gain professional status and advancement. Clearly, each of these value-laden aims implies different emphases, 'agendas' and strategies. That is, the points of the language-games and forms of life involved are very different.

Constructive debate can only occur once these value-laden aims have been revealed. And it is only then that agreement over psychology's aims and values will at least be *possible*. This is not to say that aims 'exist' and, in some sense, wait to be revealed. Rather, discussing aims is just a way of deciding which values should be valued without descending into relativism.

The final conclusion of this section, then, is that values have to be introduced explicitly into psychology not only because human actions are inevitably ethical, but also because their omission stands in the way of effective debate over psychology's *raison d'être*.

5.3.3 REFLEXIVITY AND 'PURE' AND 'APPLIED' PSYCHOLOGY

5.3.3.1 Discussion

In Chapter 1 Section 1.4 it was noted that the distinction between 'pure' and 'applied' psychology was becoming blurred in the minds of many psychologists. For example, Middleton and Edwards (1985) suggested that the distinction between 'pure' and 'applied' psychology could be circumvented by viewing psychology as both 'theory' and 'need' driven. This led to a recommendation that psychologists should adopt an 'ecological' approach emphasizing "how people function in naturally occurring circumstances" (p. 149).

Similarly, a trend was noted in which clinical work was being understood as research in its own right ((e.g.) Shapiro, 1985; Watts, 1984). It was suggested that this helped explain why clinical psychology, at least in the United States, was growing fast, dealing directly with issues such as racism and delinquency rather than having its efforts directed by theories produced in 'pure' psychology. Also, this understanding was used to explain Watts' (1984) criticism that 'applied' psychology in Britain was more concerned with producing theoretical and methodological illumination than targetting issues of immediate clinical concern.

In simple terms, these authors and others have challenged the idea that theories produced by 'pure' psychology -developed by examining the so-called 'basic principles' of human psychology- should act as the framework for 'applied' psychology. This challenge gains some support from the fact that the distinction between 'theory' and 'fact' has also become blurred. Both of these distinctions implicitly assume that the phenomenon a psychologist might study in the laboratory is not the same as the natural phenomenon.

Given this assumption, theories developed in 'pure' psychology can quite easily be assigned a secondary role in 'applied' psychology. That is, if this perspective is assumed then it follows that the most 'appropriate' theories will be developed amongst 'naturally' occurring phenomena and not in the laboratory or the 'pure' research situation.

However, adopting this perspective does not end debate. As was discussed in Chapter 1, Section 1.4, at the extremes two possible, and contrasting, conclusions can be drawn. Either the scientific *method* -the method

employed by 'pure' psychology- could be used directly in applied settings, or applied areas could develop their own methods.

In other words one possibility is to treat both 'pure' and 'applied' research as 'pure' research and therefore use the methods of 'pure' research in both. The second possibility is to treat both 'pure' and 'applied' research as distinct areas of 'applied' research. In this case each area of research would be required to develop its own idiosyncratic methods.

The former option is recommended by Shapiro (1985) while sympathy for the second option can be found in such concepts as 'congruence' in Rogerian psychotherapy (Rogers and Stevens, 1967) and the advocacy of 'eclectic' therapy ((e.g.)Feldman, 1985). Both options take knowledge to be relative to a particular context. However, the second option takes this assumption further than the first by bringing into question whether *useful* knowledge is always a product of the scientific method.

Finally, it was concluded in Chapter 3, Section 3.4.4 that when understood from the viewpoint of the *Tractatus* the blurring of the distinction between 'pure' and 'applied' psychology is inevitable. This was explained largely in terms of the inability to determine, *a priori*, the underlying form of human psychology. Thus, 'pure' psychology cannot produce prescriptive accounts of human behaviour that could rightfully be used in 'applied' settings. An analogy was drawn in this way with the impossibility, expressed in the *Tractatus* of determining the underlying logical form of language.

Using the arguments presented in the previous section it can now be shown how the difficulties in the 'pure/applied' distinction can be avoided, and how the two options that arise from the blurring of this distinction can be reconciled.

When understood as language-games theories can be seen as an *exploration of grammatical possibilities*. Thus, theories developed in 'pure' research and theories developed in more applied settings simply express different grammatical possibilities. In this sense 'pure' and 'applied' approaches are *distinct* since they involve different language-games and forms of life. However, because they are both examples of possible language-games using similar or related concepts theories developed in 'pure' research can still be used in more 'applied' areas. That is, there are not different causal or even logical structures determinately underlying the difference in the forms of

'pure' and 'applied' research which might prevent, in principle, the application of theories developed in 'pure' research.

Thus, laws discovered through an experimental analysis of behaviour, for example, could be helpful in areas where people can be 'taught' how to play the particular language-game of reinforcement by consequences (See Section 5.3.7, below). Of course, 'being taught' does not here imply that it is necessary to *explicitly* teach reinforcement contingencies. Behavioural control can occur without the subject being told of the manipulation. But this does not mean that the manipulation should therefore be understood causally. There is a sense in which people follow a rule 'blindly' (P.I. 219) and so could be said to play a language-game 'blindly'.

Similarly, Wittgenstein (1953) spoke of the phenomenon of "aspect blindness" (P.I. II, xi, p. 214) in which people are unable to see something as an *aspect* of a phenomenon. That is, people can be said to be 'aspect blind' when they cannot see alternative 'forms' of a phenomenon (See Chapter 4, Section 4.5 on the concepts of 'seeing' and 'seeing as'). Thus, in such a situation people may be playing a particular language-game without seeing its aspect as, for example, a sequence of stimulus-response-reinforcement. But this does not detract from the fact that it is still a case of a game being played rather than of action being causally determined. If this situation *were* understood causally reflexive paradoxes would be difficult to avoid.

It is important to emphasize that the justification for using theories developed in 'pure' research in applied settings is *not* that 'pure' research discovers the fundamental structure or universal laws of human action. Rather, what justification there is amounts to nothing more than the fact that such theories reveal ways of speaking and acting that are *grammatically possible*. The decision of whether or not to use 'pure' theories in areas such as clinical psychology and psychotherapy ultimately remains an ethical act - that is, an act without justification.

At this point connections can be clearly seen between the debate over 'pure' and 'applied' research and the issues of values and theoretical unity discussed above. If a challenge is being made to the idea that 'pure' research can provide psychology with generally applicable theories then obviously theoretical unity is also being challenged. And the question of when to use 'pure' theories in applied settings once again introduces values into research.

Furthermore, the claim that it is possible to use theories developed in 'pure' research in applied areas does not mean that the importance of *ecological validity* in psychological research is being denied. In fact, 'ecological validity' can be interpreted quite readily in terms of language-games. Language-games that arise in 'pure' research can often appear to be in conflict with 'naturally occurring' language-games. It is suggested here that this occurs because the conceptual relationships *and* distinctions between the two types of language-games are often obscured by the surface appearance of language (P.I. II, xi, p. 224). And it is this obfuscation that gives rise to the claim that a theory lacks ecological validity.

For example, some of the claims radical behaviourists make about people and human action have been the subject of both public and professional dispute. Such debates arise, it is suggested here, when it is not realized that the same word can be used in different but related ways in different language-games, and that no one way is the *only* way to use the word. So long as debate is thought to be about so-called substantive claims about phenomena it will be unresolvable. By understanding the conflict in grammatical terms it can be seen that no challenge to 'substantive' reality can possibly be being made.

Such an emphasis on the grammatical aspects of intellectual conflicts may help to avoid some of the misunderstandings described by Czubaroff (1988) in the following quote;

Whether through genuine or willful misunderstanding or because of dogmatic commitment to substantively different positions, scholars engaged in strategic scientific debates frequently refuse to take each other seriously and as a consequence their discussions degenerate into fruitless cross-purpose exchanges. (p. 329).

Czubaroff (1988) was particularly interested in the controversies surrounding Skinner's work but the point is a general one. Essentially, it is claimed here, such misunderstandings result from a blindness to the grammar of other approaches.

So, conceiving of theories as language-games allows for a distinction to remain between 'pure' and 'applied' research. However, 'pure' research is

no longer seen as the provider of foundational knowledge which can then automatically be put to work in applied situations. Instead, 'pure' research is seen as a setting that is grammatically related to so-called 'natural' settings and is as likely as any setting to uncover helpful grammatical possibilities and insights. (As an aside it is interesting to speculate that perhaps the traditional emphasis on 'pure' research has more to do with the institutionalization of science than with any intellectual heritage. That is, a 'pure' form of research could have become established once scientists were housed in their own buildings, therefore allowing distinctive forms of life to arise. Before this point only private wealth or unrestricted patronage would have enabled 'pure' research to take place. However, such speculations are not central to the aims of this study.)

The present perspective can also shed some light on the concept of 'congruence'. It was suggested in Chapter 1, Section 1.4 that 'congruence' is not a prescriptive method -and in a sense not useful- in much the same way that the instruction "Be spontaneous!" is not prescriptive. The term, of course, is meant to suggest a certain type of openness on the part of the therapist, allowing a consistency between how the therapist acts and feels.

Seen grammatically it is perfectly conceivable that 'congruence' is a useful concept in psychotherapy. That is, despite the fact that it prescribes nothing in particular it is obviously part of a language-game. As such it is irrelevant whether or not explicit criteria can be given for its use. All that would matter is that a therapist learnt how to play the language-game that could be called 'being congruent'. In fact, that there are no explicit criteria for its use may simply be part of the grammar for the concept and thus part of what is involved in learning how to play the language-game. However, saying this in no way ensures that 'congruence' is an effective tool in psychotherapy.

Of course, if the concept of congruence were to be viewed in this way all speculations about there needing to be a kind of mystical symmetry between a therapist's inner feelings (understood as some sort of psychological state) and outward actions could be summarily discarded. 'Congruence', that is, should not itself be considered to be some sort of psychological state of affairs. The fact that explicit criteria cannot be given for whether or not a therapist is being congruent should not mean that in order to defend the concept inner criteria have to be postulated. To be taken seriously from a grammatical perspective 'congruence' needs neither objective, explicit

criteria nor subjective, implicit criteria. (A similar point is made in Section 5.3.4.1, below where it is argued that the word 'I' sometimes does not denote a person. But this does not mean that the word 'I' is thus being used wrongly or misleadingly. All that is meant is that 'I' has a distinct grammar of its own.)

In similar fashion the Rogerian concept of 'empathy' can be understood from a grammatical perspective despite the fact that it seems to prescribe nothing in particular.

In Chapter 4, Section 4.5 it was argued that the concepts of 'seeing' and 'seeing as' are distinct and should not be confused. In particular, it was suggested that the concept of 'seeing as' should not be thought of as 'seeing' plus something else. 'Aspect seeing', it was claimed, is just as fundamental as any other type of seeing.

In the therapeutic situation 'empathy' can be seen as an attempt on the therapist's part to use the concept of 'seeing' in preference to the concept of 'seeing as'. For example, if a client were to express a deep fear about some object the therapist employing 'empathy' might to some extent try to see the object as frightening. Therefore the therapist could say quite naturally "Yes, I see how frightening it is."

However, presumably the therapist is able to see the object in other ways too. Thus, seeing the object as frightening is just one of several *aspects* that the therapist can see in the object. And, further, the therapist may see his or her *fear* in several ways ((e.g.) as a physical reaction, as a consequence of childhood conditioning, as an attempt at therapy) whereas the client may see his or her fear in one way ((e.g.) as a reason for avoiding the object).

Although this point has only been discussed in brief the following suggestion can be made. Through 'empathy' a therapist hopes to help a client to master the technique of 'aspect seeing' in a particular situation. That is, if a therapist can 'see' something as a client sees it ('seeing') but is also able to see it in other ways ('seeing as') the client could be helped by the therapist to learn how to see different aspects of the situation. For the client this 'learning' involves being able to use the concept of 'seeing as' instead of 'seeing'. As mentioned in Chapter 4, Section 4.5 this ability to shift between aspects is not logically connected to any aspect of an object or to any psychological event. What has to be taught is the mastery of a concept.

5.3.3.2 Conclusion: Reflexivity and 'Pure' and 'Applied' Psychology

When psychological research is applied issues of reflexivity become acute. Perhaps this should not be surprising since psychological intervention is probably the most direct of all interventions. And perhaps it should not be surprising, too, that assessing the rights of making such interventions and their validity and worth is a priority for many psychologists *and* non-psychologists. It is in the light of these concerns that arguments regarding the relationship between 'pure' and 'applied' psychology have been considered in this study.

So, what *right* does a theoretical psychologist have to apply a theory in the 'real' human world? And how *valid* are 'pure' theories in the world beyond the research setting? In fact, is it *worth* even trying to apply 'pure' theories outside of the laboratory? Such questions seem important because of the simple observation that psychologists "after all" are only people making theories about people. This observation suggests the possibility that even the objective approach of 'pure' science is just one of several *subjective* perspectives. And this in turn challenges the traditional view that 'pure' psychology should provide the theories and 'applied' psychology should apply them.

The endless reflexive arguments which often ensue over the 'rights', 'validity' and 'worth' of 'pure' theories can, it is claimed here, be avoided by understanding the distinction between 'pure' and 'applied' psychology in terms of language-games. Such arguments are avoided because attempts to explicitly establish 'rights', 'validity' and 'worth' can be abandoned. Instead, as was described in the preceding discussion, such attempts can be replaced by thorough and careful examinations of the grammatical relationships between theories ('language-games') produced in 'pure' psychology and the naturally occurring language-games in applied settings. If careful note is made of the different ways in which various concepts are used in these two settings then theories from 'pure' psychology need not be seen as lacking 'ecological validity'. Rather, they represent *particular* grammatical possibilities.

But on the other hand this does not mean that such theories *should* be applied. In fact, it has been argued that as a consequence of this approach 'pure' psychology would have to abdicate the aloof, pre-eminent position suggested by its name. This would in no way devalue the role played by

'pure' psychology in the exploration of the *possibilities* of human action. Nevertheless, it would mean that 'pure' psychology could no longer be understood as a search for the *fundamental building blocks* of human action.

Finally, as was noted in the preceding discussion, choosing to apply a theory or method -whether from 'pure' or 'applied' psychology- is an ethical act without justification.

It could be said that the distinction between 'pure' and 'applied' psychology is blurred insofar as *both* approaches are understood in terms of language-games. Since there is no pre-eminent language-game the relationship between 'pure' and 'applied' psychology cannot be *hierarchical* -thus the blurring. However, this does not mean to say that 'pure' theories lack 'ecological validity' or that 'pure' research is worthless in the 'real' world. Rather, such theories emphasize and express aspects of grammar that are sometimes quite different from those emphasized and expressed in 'naturally occurring' language-games.

An example should help illustrate this comment.

Given the present perspective the principles of behaviour modification do not *represent* any fundamental laws of human action. However, in certain situations -such as education in schools- it may be easy to see human activity as a manifestation of behavioural principles.

This would especially be so if a particular, perhaps more traditional, view of what 'schooling' involved was assumed ((e.g.) performing knowledge related tasks, remembering facts and methods, etc.). Behaviour modification and *this* view of education have clear grammatical relationships and similarities. In fact, it could probably be said that similar language-games are played in both settings. Therefore, in this instance at least, behaviour modification could appear to be 'ecologically valid'. (Of course, if a different view ('language-game') of education and schooling was adopted the grammatical relationships between this new view and behaviour modification could be obscure.)

But in another setting, for example counselling, the grammar of behaviour modification may seem to bear little resemblance to the grammar of the language-games employed by the client. Therefore, applying behaviour

modification techniques in this instance *may* appear to 'miss the point' of the client's problem and therefore lack 'ecological validity'.

In this regard it is interesting that Skinner's (1957) book *Verbal Behavior* can quite easily be seen as a translator's guide between the language of behaviour analysis and many expressions in 'everyday' language. And the many literary examples Skinner uses to such good effect in this book reinforces such an impression.

In conclusion, the following view of 'pure' and 'applied' psychology is suggested. Concern for the 'validity', ecological or otherwise, of theories in psychology should be replaced by the effort to understand the aims of an instance of research. Once the aims of a piece of research are understood then any theory ('language-game') that achieves these aims can be employed.

The *aim* of 'pure' research could be understood in broad terms as the exploration of the grammatical possibilities of psychological concepts. Thus, the theoretical exercise could be seen as a process of discovering, clarifying and then exploring aspects of grammar. In this task 'theoretical constructs' are simply tools (models, metaphors, etc.) for giving training in aspects of grammar. Because of this the appropriateness of a theory developed in 'pure' research for a particular 'applied' situation could be judged solely in terms of the *aims* and needs in the applied setting. This is because by seeing 'pure' research as the exploration of grammar rather than as the discovery of the basic laws or structure of human action applied practitioners are free to accept and reject the insights of 'pure' research on their own terms. That is, accepting and rejecting theories in terms of what is needed or desired in a particular situation.

Yet from this viewpoint the discoveries made in 'pure' research would still be respected since they would provide insights into the *possible* ways of understanding people. This should not be confused with possible ways of 'picturing' what people are like. For, as will be argued in Chapter 6, below, understanding is not just a case of having a 'picture' of something. And, further, perhaps the 'better' theories would be those that incorporated more grammatical insights and subtleties.

In fact, understanding 'pure' research in this way would more than likely reveal what Wittgenstein (1969) termed "framework facts" about

psychological phenomena. For Wittgenstein (1953) that what cannot be any other way is what is grammatical. This is brought out in the presuppositional and normative roles of 'grammar' (Finch, 1977, pp. 153-161). For example, the fact that two objects cannot occupy the same place is, for Wittgenstein, an aspect of grammar. Discovering such 'facts' in psychology would highlight the points at which new theoretical perspectives could be developed, thus helping in theory 'generation'.

So from the present perspective 'pure' psychology remains distinct from 'applied' psychology by virtue of its aim of exploring the grammar of psychological concepts and phenomena.

5.3.4 REFLEXIVITY AND CONSCIOUSNESS IN PSYCHOLOGY

5.3.4.1 Discussion

The tangled nature of the concept of 'consciousness' has been simplified greatly in psychological theorizing. Not surprisingly, it is difficult to encompass in one theory the subtleties and varied uses of such a concept. For example, uses such as being 'knocked *unconscious* or *semiconscious* ', a 'conscious decision' -with its connections to the concepts of 'responsibility' and 'guilt'- and 'consciousness raising' arise in very different contexts. Each context adds to the list of characteristics that supposedly belong to a unified concept of 'consciousness'.

As a construct in psychology 'consciousness' has most often been understood in terms of a factual psychological state. That is, consciousness has usually been seen as an individualized state of mental awareness of the world and, in humans, the 'self'. This view of consciousness was discussed in Chapter 1, Section 1.6.

In the following considerations three topics will be examined from the perspective outlined earlier in this Chapter. (1) The first topic concerns the transformations between the poles of 'Person constructs Reality' and 'Reality constructs Person' which Buss (1978) claimed help to explain the historical revolutions and counter-revolutions in theoretical psychology. (2) The second topic is the difficulty of distinguishing between the specific contents of an awareness and the 'intrinsic character' of an awareness (Natsoulas, 1981; See Chapter 1, Section 1.6.1). (3) The third topic is the nature and role of the psychological subject.

Before examining these topics an important point has to be made concerning a fundamental difference between the traditional view of consciousness and that of the present perspective. Implicit in most constructions of consciousness is the assumption that consciousness is a pre-condition for having meaningful phenomena or, even more strongly, that consciousness actually *generates* meaning. But the approach presented in this chapter suggests that if paradoxical conclusions are to be avoided meaning cannot be said to have a factual pre-condition. And meaning certainly cannot be said to be a product of something factual.

This is an extremely important difference and follows from the primacy of meaning which is an implicit principle in Wittgenstein's 'Late' philosophy (See Chapter 4, Section 4.2.1). Ultimately, it is suggested here, meaningfulness does not depend, in a causal or factual sense, on the awareness of a conscious perceiver. From the dominant Cartesian perspective it is difficult to understand how this could be possible since without a subject to notice the meaningfulness of a phenomenon 'meaning' becomes a meaningless concept. How it is possible to conceive of meaning without it being factually dependent on a conscious perceiver will be clarified when the nature of the psychological subject is discussed later in this section.

(1) 'Person constructs Reality' or 'Reality constructs Person'?

When theorizing in psychology much depends on whether people are thought to create reality or reality is thought to create people. However, despite this fact, choosing between the two options can seem quite arbitrary. Unfortunately this arbitrariness cannot be avoided by claiming that both options are correct to some extent. For even in that case there would still be the difficulty of determining which of the two options is appropriate in different circumstances.

So it is suggested that if reflexive paradoxes are to be avoided *both* options should be considered unsuitable. If people construct reality then the paradoxical aspects of solipsism and extreme relativism of knowledge beckon. And if reality constructs people then the question of which *person* would presume to comment on such a reality looms large. That is, any comments a person made about reality would be constructed by a 'reality' forever tantalizingly hidden.

So instead of opting for one or the other of the two approaches it would be more profitable and satisfying in terms of reflexive problems if these difficulties were understood from a grammatical perspective. In this respect it will be helpful to remember the discussion of the two concepts of 'seeing' and 'seeing as' in Chapter 4, Section 4.5. It was argued there that these two concepts are distinct and should not be confused. In particular, the concept of 'seeing as', it was claimed, should not be thought of as 'seeing' plus something else. That is, 'aspect seeing' is just as fundamental as any other type of seeing.

It is now possible to understand the 'Person constructs Reality' pole in terms of the concept of 'seeing' and, conversely, the 'Reality constructs Person' pole in terms of the concept of 'seeing as'.

In the first case, if the concept of 'seeing' is taken to be the more fundamental of the two concepts then theoretical psychology will end up promoting some form of solipsism. The inevitability of this solipsistic world, at least for a computational psychology, was suggested by Fodor (1980) (See Chapter 1, Section 1.7.1). In such a world all meaningful phenomena reduce to what individual people 'see' in some sense. Thus, there is *nothing but* what people 'see' -and in the extreme there is nothing but what one particular individual sees. That is, all there is is what 'I' see.

The paradox involved in this approach was mentioned by Katz and Frost (1979) and has already been discussed fully elsewhere (See Chapter 1, Section 1.7.1). In Chapter 3, Section 3.4.5 this paradox was explained in terms of the concept of the 'metaphysical subject' -a term used by Wittgenstein (1974a) in the *Tractatus* . Briefly, the solipsist, it was argued, makes the mistake of treating the metaphysical subject as if it were a part of the world or a special kind of object, whereas in fact it only defines the *limit* of the world.

However, the present perspective suggests that the vital mistake is to think that 'seeing' in the 'first person' case must always be understood as belonging to a *person* -whether factual or metaphysical. The alternative, of course, is to understand the concept grammatically. When understood in this way the necessity to think in terms of the familiar Cartesian subject disappears.

In the discussion below on the nature of the subject it will be argued that in expressions such as "I see such-and-such" the term 'I' does not refer to a

person. However, at the moment all that need be understood is that 'seeing', like any other concept, has a grammar. And its grammar is independent of any factual concerns such as the presence of a psychological subject.

In contrast to the 'Person constructs Reality' pole, it will now be argued that the pole of 'Reality constructs Person' emphasizes the concept of 'seeing as'. Instead of simply 'seeing' something it is possible to have the experience of seeing something as just one aspect of several possible aspects. That is, each person -and also the same person at different times- could be conceived as seeing different *aspects* of reality. This view may be particularly appealing for a theoretician who himself or herself can see the various aspects of a situation that other individuals 'see' separately -that is, without seeing something as an aspect. It could be said that such a theoretician is actually seeing other people's 'seeing' as if it were a case of 'seeing as'.

If the theoretician does not realize that there are important *grammatical* differences between the two concepts of 'seeing' and 'seeing as' a seemingly innocent assumption is waiting to be made. It may be tempting, that is, to think that individuals 'see' only particular aspects of a reality that is independent of any particular instance of 'seeing'. This is exactly the same assumption that Wittgenstein (1953) criticized in respect of ambiguous figures such as the 'duck-rabbit' picture (See Chapter 4, Section 4.5). With such figures Wittgenstein (1953) argued that it would be a mistake to think that there was something -such as, for example, sense data- that was then *interpreted* in various ways.

The problems involved in this two-tier view of 'seeing as' have been described well by Seligman (1976) and were discussed in Chapter 4, Section 4.5. Put simply, noticing that there are several aspects to reality does not mean that there must therefore be one reality which is variously interpreted or 'seen' in various ways. This mistaken conclusion implies that 'reality' can exist independently of all instances of 'seeing', which are now understood as *interpretations*. It is not surprising that once 'reality' has this priority over 'seeing' the further conclusion that this reality constructs people becomes more feasible and even compelling. In other words, if it is assumed that there is a reality independent of all seeing then this reality cannot be something that is constructed by persons. Thus, if a causal chain is

still desired, the only option left is to assume that it is *this* reality that constructs people.

By realizing that 'seeing' and 'seeing as' are distinct concepts, and that one is not more fundamental than the other, it is possible to avoid both sets of paradoxical conclusions. It is enough, as it were, to simply realize that the seemingly arbitrary nature of the choice between the two poles of 'Person constructs Reality' and 'Reality constructs Person' can be traced to the use of two grammatically distinct concepts. Any attempt at further explanation would only end in an infinite regress. That is, explaining why people see different poles would have to be done from the point of view of one of the two poles. Thus, if the situation is not understood in terms of grammar an infinite regress will be generated.

All of the above arguments highlight the fact that there are limits to causal explanation and that these limits have been reached once reflexive issues are discussed. And once again reaching these limits simply re-emphasizes the fact that meaning must be prior to everything, including ontology and epistemology. Ontology, of course, is basically an attempt at an *explanation* of reality.

So, in conclusion, the two poles of 'Person constructs Reality' and 'Reality constructs Person' cannot be understood ontologically if reflexive paradoxes are to be dissolved. Instead they should be understood grammatically. In particular, they can be understood as stemming from the use of two quite distinct concepts: 'seeing' and 'seeing as'.

(2) 'Contents' of Awareness versus the 'Intrinsic Character' of Awareness

According to Natsoulas (1981) there is a problem involved in trying to distinguish between the particular 'contents' of an awareness and its 'intrinsic character'. This problem was described in Chapter 1, Section 1.6. It was also suggested in that discussion that the 'intrinsic character' of awarenesses is related to Nagel's (1974) notion of a 'subjectivity' that is ultimately beyond the scope of human concepts. Further, in Chapter 3, Section 3.4.5 the idea was put forward that this 'intrinsic character' or 'subjectivity' is the same as Wittgenstein's (1974a) notion that the metaphysical subject can experience 'the world' as 'my world'. Given this similarity it was concluded that from the viewpoint of the *Tractatus*

'intrinsic character' -or content as sheer content- is an attempt to say the unsayable.

The distinction between the 'contents' and 'intrinsic character' of an awareness can now be understood as a mistaken attempt to *explain* meaningfulness. As was mentioned in Chapter 1, Section 1.6 the problem that arises in making the distinction hinges on the difficulty of incorporating meaning into a theory of consciousness. That is, if meaning were understood as a function of the 'intrinsic character' of an awareness there would be a paradox involved in speaking meaningfully about the concept of 'intrinsic character' itself. This paradox is analogous to that surrounding attempts in the *Tractatus* to speak meaningfully about logic.

Alternatively, if meaning were understood as a function of the 'contents' of an awareness then the concept of 'awareness' would become meaningless. This is because there would never be anything other than contents. Therefore the relationship between contents and awareness itself would only be expressed as a further content. Thus there would be no access to awarenesses understood as something distinct from contents.

As just mentioned, in the terminology of the *Tractatus* the 'intrinsic character' of awarenesses reduces to the extensionless point of the metaphysical subject. In particular, 'my world' epitomizes what is intrinsic to all awarenesses -that is, the 'myness' of awarenesses. Or to put it another way what is intrinsic to all awarenesses is the 'seeing' that is co-ordinated with the metaphysical subject. Conversely, the factual contents of awarenesses are analogous to 'the world' of the metaphysical subject.

However, by the time of the *Philosophical Investigations* even the metaphysical subject as the co-ordinating point of the world is abandoned. Instead, the difference between 'content' (what is 'seen') and 'intrinsic character' or 'myness' (the 'seeing' itself) is expressed as a *grammatical* difference between 'first' and 'third' person language. (Actually, it will be argued in the following section that it is something of a misnomer to call the use of 'I' the 'first person' case). That is, the *uniqueness* of the first person experience is admitted but the *ownership* or *metaphysical privacy* of this experience is denied (Finch, 1977, p. 108). The first person experience, so to speak, is not metaphysically unique but grammatically unique. Of course, implicit in this is the undermining of the metaphysical existence of the 'I' - but again this is to be discussed below.

It is being assumed that the supposed 'intrinsic character' of an awareness is nothing more than the traditional, Cartesian, solipsistic, belief that what is common to *all* instances of 'seeing' or consciousness is that they all belong to 'I'. This belief is being challenged here so it is worth examining the arguments that Wittgenstein (1953) made against it. According to Wittgenstein (1953) the solipsist wants to say that, "when I imagine something, or even actually *see* objects, I have *got* something which my neighbour has not" and, further, "At any rate only I have got THIS." (P.I. 398). And the solipsist imagines that 'THIS' is like the actual 'seeing' itself that is being seen and 'referred to'. The point Wittgenstein (1953) goes on to make is that 'THIS' is not a question of seeing at all. It is, as it were, something other than anything that is seen. It is not possible to see this 'seeing' and therefore it is not possible to 'have' or 'possess' 'THIS'.

However, Wittgenstein (1953) claimed to understand what the solipsist means here. Thus;

But what is the thing you are speaking of? It is true I said that I knew within myself what you meant. But that meant that I knew how one thinks to conceive this object, to see it, to make one's looking and pointing mean it. I know how one stares ahead and looks about one in this case -and the rest. (P.I. 398).

Wittgenstein (1953) used the example of the 'visual room' as opposed to the material room to explain his point further. About this room he stated;

I can as little own it as I can walk about it, look at it, or point to it. Inasmuch as it cannot be any one else's it is not mine either. In other words it does not belong to me *because* I want to use the same form of expression about it as about the material room in which I sit. (P.I. 398).

What belongs to someone (including 'me') can be pointed to, looked at, walked around -perhaps-, etc.. It is *because* the solipsist wants 'THIS' to belong exclusively to him or her that it cannot belong to him or her at all. For if the solipsist were able to own 'THIS' the way an object could be owned it should be able to be looked at, pointed to, etc.. Yet Wittgenstein's point is that 'THIS' -the 'visual room'- cannot even be seen let alone possessed.

Rather, the supposed discovery of the 'visual room' is really a "new way of speaking, a new comparison" or even "a new sensation" (P.I. 400). It is a "grammatical movement" or a "new way of looking at things" and not a "quasi-physical phenomenon" (P.I. 401). It is not as if this 'seeing' is a new kind of object. Rather, it is a new aspect.

In particular, 'THIS' is really just the immediacy, indescribability, and incomparability of the 'first person' case, or what is *correct* in solipsism (See Finch, 1977, pp. 122-123). Ultimately this immediacy expresses itself solely as the grammatical uniqueness of a particular language-game and not as the experience of a subject.

So, in conclusion, it can be said that the problems involved in distinguishing between the 'contents' and 'intrinsic character' of awarenesses stem from a failure to appreciate a difference in grammar. Experiencing the 'intrinsic character' of awarenesses -their immediacy, indescribability and incomparability- as being distinct from the 'contents' of awarenesses is not a factual matter. In fact, it is probably misleading to even speak of 'immediacy', 'indescribability' and 'incomparability' as these may appear to represent factual differences. Rather, the 'discovery' of the 'intrinsic character' is actually a grammatical change and not the discovery of a new kind of object.

The shadow of the 'subject' has fallen over much of the preceding discussion. This shadow will now be examined.

(3) The Nature and Role of the Psychological 'Subject'

Perhaps no concept is more closely related to the problems caused by reflexivity than the concept of the 'subject'. For there can seem nothing more compelling than the idea that it is *subjects* who think, feel, imagine, understand and theorize. Therefore, it must be subjects who think and theorize about 'subjects'. The appeal of such an idea is witnessed to by the fact that in the centuries since it was formalized by Descartes it has remained, in some form, the common currency in the commerce of both everyday and intellectual thought. And this despite the many philosophical problems that have been associated with the Cartesian perspective by various philosophers.

Psychology, of course, has not been immune from the influence of 'Cartesianism'. The reaction to Skinner's (1971a) suggestion that

'autonomous man' should be thrown out of psychology shows how strong the influence has been.

The following discussion will first summarize comments made earlier in this study about the psychological subject. Then, an understanding of the 'subject' that avoids the difficulties associated with the concept without abandoning anything valued by the 'Cartesian' will be presented.

In Chapter 1, Section 1.6.2 the psychological 'subject' was discussed in terms of the 'causal agent self' and the concept of 'intentionality' was considered to be an essential feature of this model. This approach was contrasted with social constructionist accounts of the subject. In particular, mention was made of accounts which examined social forces -such as psychology-supposedly maintaining 'individualism' and 'personal identity'.

It was suggested in that discussion that the 'intentionality' which gives rise to so many reflexive problems in an individualistic psychology is not overcome by the social constructionist approach. This is because even a social constructionist account of the 'subject' could be seen as the product of individuals rather than as the product of social forces. That is, social constructionism does not show *why* the subject is not the primary causal force, which is what would be needed to ease reflexive problems. The best such accounts can do, so to speak, is to set up a rival 'paradigm' to individualism and then hope that the new paradigm outlasts the older one.

It was concluded in Chapter 1, Section 1.6 that 'consciousness' is a construct that can supposedly be *referred to* but is difficult to know how to *use* -a dilemma that echoes the distinction between meaning as 'reference' and meaning as 'use over time'. This dilemma, it was claimed, is closely related to the conceptual problems surrounding the notion of the 'subject'.

A central problem with the concept of the 'subject' is that people can be understood as both objects *and* subjects (Buss, 1978, p. 59). People are, as it were, both conscious *and* in the consciousness of others. Thus, on the one hand it seems valid to assume that as objects people should be able to be studied. On the other hand all such study is the product of a 'subject' and is therefore ultimately 'subjective'. Delimiting people as objects seems to deny their status as subjects. Yet, presumably, it is in their capacity as subjects that people do the delimiting. In a manner of speaking it is at the heart of the reflexive paradox that, apparently, it is people who study people.

The pivotal suggestion of this section, and one that will hopefully help to dissolve reflexive problems, is that in some uses the term 'I' *does not denote a person* (P.I. 410). In particular, it is suggested that 'I' does not denote a person in first person expressions that deal with psychological phenomena. This is the case, for example, with expressions such as "I see the blue sky", "I am in pain" and "I have a toothache". This is a very important point since if there are cases in which 'I' does not denote a person the uniqueness of 'first person' experience can more clearly be seen to result from a unique grammar for the word 'I' rather than from a unique metaphysical perspective.

Finch (1977, pp. 115-116) described two cases of the use of 'I' mentioned by Wittgenstein in the *Blue Book*. In the first case the use of the word 'I' is on a par with the third person usage and denotes a person. Examples of this case would include statements like "I have a scar on my leg" and "I have grown a centimetre". 'I' is used here as an object. In the second case 'I' is used as a subject. This happens in statements of the kind "I am in pain". Wittgenstein's (1953) point was that in such statements 'I' does not refer to a person. This distinction is argued for by revealing differences in the grammars of the words 'I' and 'person'. As Wittgenstein (1953) noted;

"When I say 'I am in pain', I do not point to a person who is in pain, since in a certain sense I have no idea *who* is." And this can be given a justification. For the main point is: I did not say that such-and-such a person was in pain, but "I am ...". Now in saying this I don't name any person. Just as I don't name anyone when I *groan* with pain. Though someone else sees who is in pain from the groaning.

What does it mean to know *who* is in pain? It means, for example, to know which man in this room is in pain: for instance, that it is the one who is sitting over there, or the one who is standing in that corner, the tall one over there with the fair hair, and so on. - What am I getting at? At the fact that there is a great variety of criteria for personal '*identity*'.

Now which of them determines my saying
that 'I' am in pain? None. (P.I. 404).

There are no criteria for the personal identity of 'I'. And, as has already been argued, even given a private world of experience such as the 'visual room' - a world which might seem to be a sufficient criterion for identifying 'I' as the person who is in pain- there is no indication of who *owns* this world. It may be insisted that "Of course, *I* own this world" but this still does not reveal who 'I' is.

This approach is very different from the position Wittgenstein (1974a) took in the *Tractatus* . The person behind 'I' in these first person cases is introduced in the *Tractatus* as the metaphysical subject. It is true that such a 'person' is said to be transcendent. Nevertheless, this "point without extension" (T. 5.64) unmistakably takes on the role of the person who owns the world, at least in the grammar of the *Tractatus* . However, in the 'Late' philosophy of Wittgenstein, as has already been indicated, even talk of a subject who is out of this world is shown to be misleading.

Finch (1977) argued that even in cases of "telling other people *who I am*" Wittgenstein [in his 'Late' philosophy] maintains that there does not *have* to be a connection between *I* and *person* and *who* " (p. 117. Brackets added). This completion of the separation between 'personal identity' and 'I' is achieved by becoming familiar with the conceivable case of feeling pain in another person's body. For example, 'I' could feel pain in someone else's body by being surgically hooked up to another person's brain. In such a case feeling pain would not be a criterion for *who* was, for example, being given an electric shock (P.I. 409). And this shows that there is no logical connection between 'I' and 'person' even in this case. That is, the fact that 'I' am feeling pain does not help to identify who is being shocked.

If in saying "I can't feel his pain" more is meant than simply that 'I' am not usually hooked up to his body, then what is being expressed is a grammatical difference between first and third person cases and not a metaphysical difference between 'I' and 'her' or 'he'. That is, if in this case 'I' does not denote a person then such a statement shows the unique grammar of the word 'I' -and that is all.

Further arguments that show why 'I' does not denote a person are extensive and will not be mentioned here. Far more important are the implications of

this position, if it is accepted, for the concept of the psychological 'subject' and for understanding reflexivity in psychology.

As Finch (1977) noted, for Wittgenstein "persons have names and identities and pains and sufferings" but "I's have none of these things" (p. 118). Of course, this is not a comment about a psychological entity called 'I' that cannot experience or have pains, sufferings, etc.. It is instead a comment about how the word 'I' is used. To put it more pointedly, 'I's' do not have pains or sufferings because 'I' and a pain, for example, are not separable in grammar. There is, as it were, no room for two entities here. There is therefore no Cartesian 'self' or 'ego' with its own private world of sensations and feelings. In other words such sensations and feelings do not need the postulation of a private world to explain or justify their existence - they are sufficient in themselves.

The self-sufficiency of sensations and feelings is closely related to a point that Hilmy (1987) made about Wittgenstein's approach to psychological concepts in his 'Late' philosophy. For Wittgenstein, according to Hilmy (1987), such psychological concepts are only intelligible "relative to the specific language games, calculi or systems of communication constitutive of their sense" (p. 139). That is, rather than seeing psychological concepts as referring to psychic states Wittgenstein considered them to be "meaningful only relative to language" (p. 140). This view is consistent with the idea that in first person cases involving psychological concepts 'I' does not denote a person. That is, if 'I' does not refer to a person then obviously statements such as "I think...", "I believe..." or "I expect..." could not be referring to specific psychological states since they would not be states of any person. Instead, 'thinking', 'believing', etc. are given *wholly* by language.

This view of the psychological subject -that is, that 'I' is specified and understandable only in terms of its unique grammar rather than in terms of a unique metaphysical perspective- is connected to Wittgenstein's claim that his own philosophy is similar to 'relativity theory'. For with such an approach, for example, "The expression of an expectation is the expectation", and the anticipation is language itself and "cannot go outside of itself" (TS 213, pp. 355-6, cited in Hilmy, 1987, p. 140). Here there is no approach, such as a psychological one, that could allow one to stand aloof from or outside of language in order to characterize supposed factual psychological states. All

possible characterizations must be relative to the language-game in which they occur.

Of course, denying the correctness of the idea of the psychological subject does not imply that 'thinking', 'expecting', 'feeling', etc. are illusory. It is just that they are present not as facts but as grammar. In a sense this is a far more prestigious position for such phenomena than that which they occupy in the traditional Cartesian perspective. For as aspects of grammar there is no possibility of their being usurped by the world of facts. An expression such as "I feel..." or "I expect..." becomes a human act embedded in life by virtue of the unity of language-games and forms of life. If someone were to say in response to such expressions, "Are you sure you really feel/expect that?" this would be an invitation into another language-game and not a question of fact. Harré (1989) noted the same point in Wittgenstein's approach to the first person case and went further to argue that such uses bring the speaker into the world of moral commitment. But this suggestion should be tempered by the discussion of values and ethics above (Section 5.3.2).

This view of first person psychological experience may seem similar to that of radical behaviourism. However, despite apparent similarities there is an important difference between this view of psychological concepts and the view presented by Skinner (1974). This difference will be discussed in Section 5.3.7, below.

In conclusion, therefore, people are *not* both objects and subjects. This is because the 'subject' use of 'I' does not denote a person. As objects, in the third person case, people feel pain, think, understand, feel ecstatic and bored, etc. and there are criteria for all of these in language. But in the first person case there are no criteria for experiencing such phenomena because 'I' is not a person but is part of a unique grammar which simply reflects, as it were, the 'immediacy' of human action.

5.3.4.2 Conclusion: Reflexivity and Consciousness in Psychology

In the preceding discussion three topics relating to the difficulty of incorporating the concept of 'consciousness' into psychology were examined. In each case it was suggested that the reflexive problems involved could be avoided but only by adopting a grammatical perspective.

In relation to Buss' (1978) poles of 'Reality Constructs Person' and 'Person Constructs Reality' it was suggested that the difference between the two is not a case of incommensurable 'theories' or of a hidden reality that only presents aspects of itself. Rather, the difference can ultimately be seen as dependent on the use of the quite distinct concepts of 'seeing' and 'seeing as'. The question of which pole is preferable for psychology cannot be answered in terms of matters of fact. Since the difference is grammatical choosing between the two is part of unjustifiable, and therefore ethical, human action (See Section 5.3.2, above).

Similarly, the distinction between the 'intrinsic character' and the 'contents' of awarenesses was found to depend on the grammatical uniqueness of the first person case and not on the existence of a unique *metaphysical* perspective belonging to the 'I'. It was suggested that the 'immediacy', 'indescribability' and 'incomparability' of the first person case is in fact given a uniqueness in terms of grammar that cannot be achieved from the metaphysical perspective.

However, the uniqueness of the first person case brought into question the nature and role of the psychological subject, which was the final topic discussed above. It was concluded that when talking about psychological phenomena the first person use of 'I' does not denote a person. Thus, it was argued that the supposed psychological subject is not in fact a person. Instead, 'I' statements can only be understood relative to the language-game in which they occur and not as referring to psychological entities.

These arguments bear directly on the concept of consciousness. For if there is no psychological subject and if the distinction between the 'intrinsic character' and the 'contents' of awarenesses is a matter of grammar then trying to understand consciousness as a factual mental state is misguided. And the goal of explaining consciousness is an impossible one. Not, of course, because there is something (that is, 'consciousness') which language cannot put into words. Rather, the goal cannot be achieved because there is *nothing* to give an account of. The feeling that consciousness is characterized by -to use Finch's (1977, p. 123) term- a "*sheer qualitative given* " arises from a misunderstanding of the use of language.

This misunderstanding is revealed in the following quote from Wittgenstein (1953);

"I" is not the name of a person, nor "here" of a place, and "this" is not a name. But they are connected with names. Names are explained by means of them. It is also true that it is characteristic of physics not to use these words. (P.I. 410)

If this point is not realized then when someone says "By 'consciousness' I mean all of THIS" it may be thought that something is being named by 'THIS'. Yet nothing is lost by seeing that 'THIS' does not name anything. In fact, if anything, it could be said that in realizing this, true expression can finally be given to the immediacy and sheer 'reality' of the world. For if 'THIS' refers to nothing then there is nothing left to interpose between phenomena and the 'non-Cartesian subject'.

Closely related to the concept of 'consciousness' is the matter of perception. And it is to the subject of perception that discussion now turns.

5.3.5 REFLEXIVITY AND PERCEPTION IN PSYCHOLOGY

5.3.5.1 Discussion

Trying to give an account of what it means to perceive the world inevitably brings to the fore various understandings of how the world and the psychological organism relate. In Chapter 1, Section 1.7 'representational' and 'Gibsonian' views of this relationship were examined in order to discover how concerns about reflexivity influence such approaches.

'Representational' theories of perception were found to involve the postulation of internal representations which categorize and, therefore, refer to the world they represent. Fodor (1980) believed that it was necessary to impose what he called the 'formality condition' on such computational theories of the mind. The formality condition states that if mental processes are formal they must only be able to operate on the formal rather than the semantic properties of representations. This is because representations, according to Fodor (1980), only have a *causal* role by virtue of differences in their formal properties. And, since the property of representation is itself a semantic property, the computational approach must inevitably be solipsistic.

Solipsism, it was suggested, is related to reflexive problems via the referential view of meaning implicit in the concept of 'representation'.

Further, the "cognitive paradox" described by Katz and Frost (1979) seemed to be connected to the reflexive difficulty of incorporating 'reality' into representational theories of perception. This paradox and Fodor's (1980) formality condition are based on a similar insight. However, while Katz and Frost (1979) saw the paradox as a fatal flaw in any representational approaches to cognition Fodor (1980) saw his condition as just that -a *limitation* on computational/representational theories.

Also, the schemata based theory of perception proposed by Neisser (1976) was said to bring the 'cognitive paradox' into starker contrast rather than presenting a way of avoiding the paradox. This is because schemata themselves have to possess the dual nature of being enduring mental structures *and* the embodiment of what the world is really like.

'Gibsonian' or 'Direct' theories of perception were discussed as an alternative to the problematic representational and schemata based approaches. Instead of internal representations the 'Direct' perceptionists suggest that rich and meaningful information is already present in the environment in the form of structured energy. In particular, *invariants* which are present in energy structures and are constant over time and/or space are perceived in the form of *affordances*. An 'affordance' is basically what the environment might *mean* to a perceiver and therefore what it *affords*.

While the direct perception approach undoubtedly avoids the solipsistic problems of representational theories it was suggested that it is still open to criticism. Firstly, it could be argued that any environment affords just about anything. That is to say, given a complicated enough mathematical or geometrical manipulation an invariant could be found for anything an organism with a 'properly attuned' perceptual system might do in a particular environment. If this is true then ultimately what an organism perceives in an environment is given by what action it ends up taking.

This is, of course, similar to the criticism often made of evolutionary biology that the fitness of an organism is ultimately given by the simple fact of whether or not it survives. If the same is true of affordances in 'direct perception' then the claim that affordances and invariants are somehow already objectively present in the environment becomes either dubious or empty. Obviously this is an extreme criticism and does not allow for the fact that despite its seemingly tautological nature evolutionary biology, at least,

has been a very fruitful approach. Presumably there is no reason to suspect that 'direct perception' would be any the less fruitful.

However, in Chapter 1, Section 1.7.2 it was claimed that there is a second criticism of the theory of 'direct perception' that, potentially, is far more damaging. Simply, the criticism is that 'direct perception' avoids the problems of solipsism and paradox only by redefining all perceptual phenomena and concepts. In this way it becomes incommensurable with representational theories of perception. And, in turn, this incommensurability means that it is logically impossible to *compare* the two approaches. Thus, there appears to be no rational way of choosing one approach over the others. The point here is the same as that made in Section 5.3.1, above, where incommensurability seemed to undermine sensible debate over the prospects of theoretical unity in psychology.

However, it will now be argued that *in respect of reflexive issues* all of these theories of perception are flawed.

It is clear that any theory of perception could be construed as an attempt to explain the meaningfulness of the world. For example, the categories produced by representations could be said to determine meaning in the 'representational' approach. And in the 'direct perception' approach meaningfulness could be thought to be determined by the structured energy in the environment that reveals invariants over time and space. The invariants then allow an organism to perceive the affordances present in an environment. In fact, Michaels and Carello (1981) stated the connection between meaning and 'direct perception' explicitly when they said that "an affordance is what the environment *means* to a perceiver" (p. 42).

In line with the overall approach that has been adopted in this chapter it is suggested that the problems of paradox, solipsism, tautology and incommensurability are a direct result of the misguided belief that theories of perception try to *explain* meaning. In trying to explain meaning the fundamental primacy of meaning is lost -thus, the difficulties.

The alternative is to understand meaning in terms of language-games. Meaning, that is, should not be thought of as a property of either mental structure or structured energy in the environment (or, in fact, of 'Dasein' as Fodor (1980) suggested). That is, meaning is not in the organism or in the environment. Instead, meaning can be understood as relative to a language-

game and form of life. And, of course, as has already been argued (See Chapter 4, Section 4.3), language-games are not factual entities and therefore they are not mechanisms that generate meaning.

From this perspective the interesting question is not what *explains* perception. Rather, it involves understanding the grammatical relationships between phenomena. For example, the question "Why does 'A' perceive 'X'?" is not answered either by the statement "Because 'A' has mental representations 'a', 'b' and 'c' that have been manipulated in such-and-such a way", or by the statement, "Because 'A's' perceptual system is attuned to such-and-such an invariant present in the structured energy in the environment". Rather, all that can be expressed -and, in fact, all that is really of interest and use- are the grammatical relationships between 'X' and other phenomena.

Both types of statement, that is, are best seen as reflections of grammatical relationships. In computational explanations of perception, for example, the manipulations carried out over representations can be seen as a form of 'constructed' or hypothesized grammar. The mistake that leads to reflexive problems is, of course, to treat this 'grammar' as if it were factual.

Similarly, in 'direct perception' *invariants* in a sense can be understood as manifestations of aspects of grammar -albeit sometimes expressed in complicated ways. But, again, the mistake is to consider them to be, ultimately, factual. In 'direct perception' invariants are factual aspects of the environment rather than of the mental world but the error is the same. To put it differently, the mistake is to consider perceptual phenomena as being something separate from, and factually independent of, language. The inseparability of language and phenomena, especially psychological phenomena, has, of course, been one of the main insights drawn from the philosophy of Wittgenstein in this study (See Chapter 4, Sections 4.3 and 4.5).

This grammatical approach has some similarities with that of 'direct perception' which deserve comment. Perhaps the most important of these similarities is the emphasis in 'direct perception' on the "animal-environment system" as the unit of analysis (Michaels and Carello, 1981, p. 17). The, perhaps commendable, unwillingness to deal with either the animal or the environment in isolation from the other seems to reflect the

impossibility, just mentioned, of maintaining a distinction between language and phenomena

However, even if this similarity exists a difference remains between 'direct perception' and the grammatical approach being suggested here. While language-games and forms of life are not factual -and cannot be if they are to reconcile the distinction between language and phenomena- animal-environment systems could quite easily and mistakenly appear to be matters of fact. That is, if treated as 'traditional' theoretical entities animal-environment systems are as vulnerable to reflexive problems as theories that postulate mental representations.

In other words, and in conclusion, while the perception of particulars is a factual matter perception, *per se*, is not. That is, whether or not someone did or did not perceive a particular phenomenon or event is a matter of fact -and the criteria for matters of fact are provided by the grammar of the relevant language-game. But a general or universal process of perception could not be a question of fact. This is because to perceive anything is to perceive something that is *meaningful*. Thus, to postulate a general process of perception would be to postulate a general process for the production of meaning. As has already been argued several times, if the problems of reflexivity are to be avoided the primacy of meaning must be accepted. Once this is accepted there is, of course, no need to postulate a process that produces meaning.

5.3.5.2 Conclusion: Reflexivity and Perception in Psychology

Each approach to perception discussed was found to have conceptual problems that were related to the question of reflexivity. Computational approaches, it was argued, suffer from unavoidable solipsism and paradox when seen in a reflexive light. In contrast, the 'direct perception' approach avoids these problems but has its own difficulties with tautology and incommensurability.

Consistent with the argument presented in Section 5.3.1, above, it was suggested that these problems could only be dissolved by understanding theories of perception grammatically. In particular, it was claimed that by understanding such theories in this way the mistake of seeing such theories as explanations of 'meaning' could be prevented. Therefore, it can be concluded that perception is one example of an area within theoretical

psychology that would benefit, at least intellectually, from viewing theories as language-games.

It was also claimed that without the burden of having to understand theories of perception as more or less factual accounts of factual phenomena they could be viewed as revealing grammatical insights into the phenomena of perception. Thus, what people *can* perceive is not limited by supposed factual constraints but is given in terms of grammatical possibilities. However, what people *do* perceive *in fact*, as it were, is given by criteria that are part of the particular language-game employed. The facts of perception are therefore internal to particular language-games.

However, this whole view of theories of perception carries an implicit challenge to some well established ideas on 'explanation' and 'causality'. For, if perceiving something meaningful in the environment is not a matter of fact then a causal explanation of what an organism perceives cannot be dealing with matters of fact either.

The following section is a re-examination of the concepts of 'explanation' and 'causality' as they were outlined in Chapter 1, Section 1.8, above.

5.3.6 REFLEXIVITY AND KNOWLEDGE, CAUSALITY AND EXPLANATION IN PSYCHOLOGY

5.3.6.1 Knowledge

One of the primary concerns that motivates an examination of the phenomenon of reflexivity is that of the status of knowledge. The truth, falsity, rightness and wrongness of assertions has long been a central issue in philosophy. In fact, this near obsessive concern over knowledge could be said to culminate in the *Tractatus* where it was assumed that if language has any substantive content it has so only insofar as it pictures true or false states of affairs in the world. Thus, from this viewpoint all meaningful language reduces to statements that are nothing more than *knowledge claims* about the way the world is.

In Chapter 1, Section 1.8 three epistemologies were described, each connected to one of three approaches to science and, in particular, psychology. The positivistic 'standard view of science' was said to hold to a *foundationalist* epistemology. This epistemology is, of course, epitomized by Descartes'

concluding, 'indubitable' axiom, "I think, therefore I am". A version of scientific realism outlined by Manicas and Secord (1983) was also described and was found to have a *fallibilist* epistemology. In this case, knowledge is understood as a social and historical product. However, knowledge is still rationally possible and is given by criteria generated by the science concerned. Finally, and further along the continuum of justified knowledge, the social constructionist epistemology based on *radical doubt* (Gergen, 1979; 1985) was critiqued. Gergen's version of social constructionism was found to completely eschew even the possibility of there being rational criteria for the truth of knowledge claims.

Criticisms of these epistemologies were detailed (See Chapter 1, Section 1.8) and it was concluded that all three were essentially inadequate. Despite the fact that both scientific realism and social constructionism espouse, to different degrees, an anti-foundationalist' approach to knowledge they nevertheless appear to succumb to the belief that, ultimately, for knowledge to be knowledge it must be rationally founded. For example, the 'fallibilist' epistemology of scientific realism comes linked with a realist ontology. This seems to be a deliberate strategy aimed at showing that theoretical knowledge and theoretical activity is rational. And social constructionism seems to promote radical doubt as a safeguard against the irrational foundations of knowledge. That is, social constructionism remains suspicious in the extreme of anything that is not rationally founded. Ironically, this appears to indicate a respect for rationality despite the fact that social constructionism assumes that rationality as such does not exist.

The belief that knowledge is only knowledge when it is rationally founded was argued against in Chapter 1, Section 1.8.4 using Wittgenstein's (1969) remarks in his book *On Certainty* . The foundations of knowledge, it was concluded, are not absolute certainty or even 'ungrounded presuppositions'. Rather, they are ungrounded ways of acting. That is, they are forms of life and language-games. And these constitute what can be called *ordinary certainties* .

What the approaches of scientific realism and social constructionism fail to recognize, it is suggested here, is that all knowledge *inevitably* exists as part of human activity. This means that there is no *need* to finally found knowledge in some rationally-rooted metaphysics. All that really needs to be guarded against are the confusions, ambiguities, omissions, etc. that arise

in discourse. And these require attention only because they are the kinds of things that, in a grammatical sense, undermine knowledge.

Despite the simplicity of this point -that there is no need to found knowledge- it seems that even the pick of the 'post-foundationalist' crop of philosophers have failed to realize it, even though their answers to this modern dilemma are undeniably enlightening. Sullivan (1987), for example, outlined the 'post-foundationalist' strategies of Richard Rorty and Alasdair MacIntyre. In respect of MacIntyre this strategy, according to Sullivan (1988), involves a process of narrative and counter-narrative. And, as Sullivan (1987) went on to explain;

...the starting point of the narrative must be explicitly evaluative.... The 'new' kind of history can incorporate all the critical work of modern scholarship, while it rejects the modern pretense of the purely detached point of view and takes its stand self-consciously in the commitments of a specific context that is the source of the history's evaluative standards. (p. 37).

The difference between this, admittedly insightful, approach and that being promoted here is fundamental. While the explication of one's values are apparently vital for MacIntyre, from the present approach it is considered impossible to be self-conscious of, and state explicitly, the *value context* of one's immediate practice. And this is part of the grammar of the words 'context' and 'values'. No matter how explicitly values are stated they will not be the values that *that* particular human activity involves. Rather, such supposedly 'foundational' values and contexts are given in the activity or language-game itself, so to speak. The confusion, and the attempt to avoid confusion, arises from thinking of values and contexts as the things that actually underlie meaningful language and action. Once again, then, the trouble comes from trying to get prior to 'meaning': as if this were something that needed doing!

Of course, there is a feeling that might be called "waking up from [or to] a context". And this feeling may seem to suggest that one has *experienced* a context. But this is not really an experience at all and is more like 'experiencing' what Ackermann (1988) calls the "horizons" of a language-game. But these 'horizons' are not things that need explicating. In fact, this

is one distinction between Wittgenstein's treatment of the 'limits of language' in the *Tractatus* and in his 'Late' philosophy. While the *Tractatus* was all about trying to explicate and explain the limits of language this concern was overtaken in the 'Late' philosophy by the desire to 'see' and 'show' the limits. Talk of the 'horizons' or limits of language-games simply indicates or shows that more than one language-game can be played, just as the notion of 'time' simply indicates that more than one event can occur. And just as the notion of 'time' does not place any limits on what particular events can occur so too the idea of 'horizons' places no artificial or *a priori* limits on what can be expressed in language. The only limits that can ever be shown are grammatical limits. But these limits are not imposed from the outside, so to speak. They are found already there in language as it is used.

When theorizing, understood in terms of language-games, is itself seen as human action then talk of such-and-such an approach being limited simply indicates that more than one approach is possible. At this level there is no sense in speaking about 'limits' to the knowledge supposedly embedded in a particular theory. For to talk of limits here is to assume that there is a notion of 'unlimited' knowledge with which 'limited' knowledge could be contrasted. Obviously, in this situation there is no such notion.

Understanding and explicating the context of a theory or historical approach is itself a language-game which can be engaged in by those who are skilled at playing it. It is not and cannot be a guarantee against the foundationless nature of human action. Once again it must be stressed that *no guarantee is needed*.

In conclusion, then, theoretical knowledge in psychology is not akin to the assertion of facts. Instead, it more resembles an invitation to play a language-game or participate in a form of life.

5.3.6.2 Causality and Explanation

In the attempt to explain phenomena two very different concepts of causality have emerged (See Chapter 1, Section 1.8). On the one hand is 'generative' causality which stresses the need to postulate hidden causal mechanisms that produce the patterns observed in phenomena. This structural conception of causality implicitly emphasizes what has been termed the 'referential' view of meaning. Theories, that is, *refer* to

structures that explain phenomena. This type of causality is promoted by Manicas and Secord (1983) in their version of scientific realism and is said to provide a rational understanding of phenomena and to produce fruitful theorizing.

On the other hand, causality has been understood simply in terms of contingent relationships between observed events. This view of causality is sometimes called 'Humean' and, it was argued, emphasizes a conception of meaning as 'use over time'. That is, causality reduces to seeing contingent relationships between events over time. Emphasizing this relationship, it is believed, enhances the chances for prediction and control.

A 'Tractarian' view of the two concepts of causality was offered in Chapter 3, Section 3.4.6 in which they were said to merge together in the transcendental realm beyond language. However, given the conclusions of the *Tractatus* it may seem that a merger beyond language is accomplished only by forfeiting sense.

An alternative way of achieving a reconciliation between the two forms of causality will now be outlined. This reconciliation mirrors that achieved by Wittgenstein (1953) between meaning as 'reference' and meaning as 'use over time' (See Chapter 4, Section 4.2.1.1).

It will be remembered that Wittgenstein (1953) found an intermediate case between meaning as something that can be 'grasped in a flash' and meaning as something that is extended over time. If meaning is understood as use over time, use in turn can be understood as an *application*. Use as an application has the virtue of being something that can both be grasped in a flash, or 'pictured', *and* extended in time. What distinguishes this type of use from 'use over time' is that the former is a human *act* while the latter can seem to be an objectively observed fact. So, when 'use' is understood as an application it is already assumed to be part of meaningful human activity. And human action, as has already been argued, is fundamentally unfounded and undetermined.

A similar sort of strategy can be used to show that the two forms of causality are not entirely incompatible. The first step in this process is to view generative causal theories as 'pictures' of causal structures. In order to explain the observed patterns of contingent relationships in phenomena these 'pictures' have to be applied in such a way as to reveal how the

patterns are produced from the pictured structures. For example, in order to understand how a clock works a connection has to be shown between the inner workings of a clock and the observed, contingent movements of the hands.

Now, in most cases the way in which a picture is to be applied is a matter of convention. That is, there are 'normal' and 'abnormal' cases of the application of a particular picture (P.I. 141). However, as Wittgenstein (1953) argued, there is always a gap between a picture and the way it is applied (P.I. 140. Also, see Chapter 4, Section 4.2.2.1). And this is true even if pictures of how to apply the picture are given. While pictures may *suggest* how they are to be applied they can never *determine* such an application (P.I. 139).

So, no matter how many pictures are given the actual application of a picture turns out to be essentially undetermined. And it is this fact that can appear to be ultimately a *contingent* fact since the application simply follows the picture without there being an intervening causal mechanism. Any postulated mechanism would still stand in a contingent relationship to *its* application.

One 'error' involved in theories of generative causality is the assumption that there is a reality to the hypothesized causal mechanisms that somehow underlies the phenomena under study. Causality seen in this way is like a transcendental glue holding phenomena together and upon which the ultimate coherence of the world depends. This, instead of seeing theories about causal mechanisms as 'pictures' that can always be applied in more than one way.

The second step in this attempted reconciliation is to notice that Humean causality accepts and emphasizes the gap between a 'picture' and its application. Because this gap exists it can be argued that any picture of hidden causal mechanisms is, in effect, arbitrary. In some sciences this criticism may not be a serious impediment to generative causal theorizing and explanation. However, in psychology the criticism is more poignant because theories can themselves be seen reflexively as psychological products. Thus, theorizing about causal structures can seem futile and possibly even harmful since the acceptance of a particular picture of causal structures and of its application could influence many interventions made by psychologists in society.

Humean causality and nomic ('law-like') explanation retreat from such theorizing and come to settle in what is observed or 'seen' -that is, the contingent relationships found in the data. (It should be remembered that at least in the case of radical behaviourism what is 'seen' can be interpreted very broadly -see Chapter 2) Since 'pictures' of causal structures can never *determine* an application no matter how many 'pictures' are given-and since causality is all about determination- the 'picturing' side of the gap is abandoned entirely. Thus, *causal* relationships must necessarily be confined to contingent relations.

However, one 'error' in theories of contingent causality is the assumption that contingent causal relationships are somehow more *fundamental* than generative causal relationships. As if, that is, contingent relationships are what is 'seen' and generative relationships are 'interpretations' of what is seen. This is the same point that has been made with respect to the concepts of 'seeing' and 'seeing as' in Chapter 4, Section 4.5. There it was argued that none of the two concepts is more fundamental than the other. So, while seeing situations in terms of contingent relationships may improve prediction and control it does so at the cost of inhibiting 'aspect seeing'. And it could quite easily be argued that seeing new aspects of situations is often of vital importance.

In other words, Humean causality is itself a 'picture' in need of a conventionally based application. It is thus on a par with other causal explanations. As with all 'pictures' there remains a gap between this 'picture' and how it is to be applied. And the clash that occurs between generative and Humean causality is a clash between two 'pictures'. The clash is resolved in just the same way as Wittgenstein (1953, P.I. 138-142) tried to resolve the clash between meaning as something 'grasped in a flash' and meaning as a practice extended in time. The very fact that both views of causality are 'pictures' that can be applied in more than one way means that the appearance of conflict need not persist.

'Seeing' or 'picturing' contingent relationships is no different from 'seeing' or 'picturing' generative causal relationships. In both cases there is no room for determinism since 'pictures', at most, can only *suggest* how they are to be applied. Thus, the ironic and perhaps surprising result of this examination is that neither generative nor Humean causality support the doctrine of a deterministic world.

Therefore, it can be concluded that both generative and Humean causality emphasize different aspects of psychological theories understood as 'pictures' in need of applications. Once again this leaves intact the notion that human action is undetermined and unfounded, this time by maintaining a separation between causal factors -such as generative mechanisms and contingent relationships- and action.

Of course, it should not be thought that human action involves the application of some 'mental' picture as this would only be a further picture which could itself be applied in various ways. Rather, this view of psychological explanations as 'pictures' needing to be applied is a grammatical comment about psychological phenomena when they are understood in the light of issues of reflexivity. Ultimately, that is, psychological phenomena are not determined by either contingent relationships or generative causal mechanisms.

5.3.6.3 Conclusion: Reflexivity and Knowledge, Causality and Explanation in Psychology

In the preceding discussion questions concerning both knowledge and causal explanation were answered by removing the barrier between these phenomena and language. On the one hand debates over the rational foundations of knowledge were completely side-stepped by founding knowledge instead in language and human action. On the other hand the seemingly divergent approaches of generative and Humean causal explanation were shown to have a common basis as grammatical 'pictures'.

In the case of theoretical knowledge it may appear that what has been argued for is the abolition of 'knowledge'. But all that has really been abolished is the notion that knowledge is a psychological entity or something that manifests itself in theories.

Further, in the discussion of causal explanation it may be questioned whether anything has actually been resolved. But by removing determinism from causal explanation two things are achieved. Firstly, the heat is taken out of arguments over the nature of causality since all theories of causality can themselves be seen as part of meaningful, non-causal human activity. That is, rival theories of causality are not competing over the ultimate causal form of the world -the stakes are not that high.

Secondly, with the loss of determinism comes the prospect of seeing the activity of psychology in an entirely new way.

For many the archetypal deterministic approach in psychology is thought to be Skinnerian behaviourism. Given the comments just made it would now therefore be interesting to discuss radical behaviourism from the perspective being promoted in this chapter.

5.3.7 REFLEXIVITY AND RADICAL BEHAVIOURISM

5.3.7.1 Discussion

Radical behaviourism was discussed in Chapter 2 as an example of one of the few approaches within psychology that has attempted to deal comprehensively with issues of reflexivity. To this end the distinctive conceptions of 'meaning', 'knowledge', 'causality' and 'explanation' employed in radical behaviourism were examined. It was concluded that, to a degree, radical behaviourism does manage to incorporate the reflexive aspects of psychology in a coherent manner (Chapter 2, Section 2.5).

However, it was suggested that there remains at least one crucial area in which lingering, and ultimately fatal, doubts about radical behaviourism's ability to handle reflexive problems are brought into sharp focus. This area concerns the status of 'private events' as 'private stimuli' (Chapter 2, Sections 2.3 and 2.4). The way in which private events are conceptualized is crucial to radical behaviourism not only because it determines Skinner's approach to many psychological phenomena traditionally understood as mental events, but also because it differentiates radical behaviourism from other forms of behaviourism (Skinner, 1974).

Basically, the difficulty with radical behaviourism's treatment of private events comes from the implied claim that first person reports of private events provide knowledge about the presence of yet to be analysed private, physical stimuli (See Chapter 2, Section 2.4). It was argued that first person reports cannot be *tacts* of internal events because the verbal community has no access to them and therefore cannot reinforce contingent on the presence of such events. Because of this, attempts to 'discover' controlling stimuli for first person reports cannot be justified in terms of the prior presence of 'private stimuli'.

The reason why radical behaviourism has such difficulties with private events can now be related to the discussion in Section 5.3.4, above, concerning the unique *grammatical* status of the term 'I' when used in connection with psychological concepts. The main difference between the two approaches to private events hinges on the metaphysical stance taken by Skinner.

Radical behaviourism is in part an apologetics for behavioural analysis. As such it argues for and attempts to justify the use of behavioural analysis. In order to justify behavioural analysis a physicalist and materialist monism is claimed and is combined with the assumption that behaviour is lawful (Costall, 1980. Also, see Chapter 2). It is this metaphysics that is behind Skinner's (1974) comment that, "the behaviors of both scientist and nonscientist are shaped by what is there but in different ways" (p. 127). It is this 'shadowy' reality, responsible for shaping *all* behaviour that Skinner promotes to the status of ontology. This is in marked contrast to the following remark from Wittgenstein (cited in Finch, 1977);

Is possibility a sort of shadowy reality?
Where is the shadow? There really is such a
shadowy reality. It is your language. (p. 148).

For Wittgenstein it seems that the only 'shadowy' reality was the world of possibility to be found in the grammar of language and not some world beyond language -or, in Skinner's case, beyond all behaviour.

Skinner's metaphysical position is revealed even more directly in the following remark;

What is lacking is the bold and exciting
behavioristic hypothesis that what one
observes is always the 'real' or 'physical'
world (or at least the 'one' world). (Skinner,
1945, p. 293).

Once again, for Wittgenstein, the "one world" could only be the 'world' of phenomena. But these phenomena cannot be separated from the language-games in which they occur. In this sense they cannot be observed 'objectively' as belonging to a 'real' or 'physical' world that is distinct from language. In fact, the "one world" Skinner (1945) mentioned can only be the world of phenomena and grammar. For it is only *this* world that

encompasses all possibilities and therefore all the varied, meaningful phenomena that can be said to be 'seen'.

It is Skinner's commitment *in the extreme* to a physicalist metaphysics and the lawfulness of behaviour that ultimately causes the radical behaviourist account of reflexivity to founder over its treatment of private events.

An alternative to treating private events as 'private stimuli' has already been foreshadowed in Section 5.3.4 where the first person use of 'I' was examined. In line with that examination the claim is made here that reports of private events cannot be clearly understood if they are thought to imply a particular object -whether that object is a mental event or a stimulus. Instead, reports of sensations, feelings, etc. are intelligible only in terms of language-games. They are moves in a game rather than 'responses' to 'private stimuli'.

First person reports have no referents. A report of 'pain', for example, can be *taken* to imply the presence of something -such as a break in a bone. But taking this implication is itself simply a move in the language-game, no matter how compelling it may appear. When psychological phenomena are reported in the first person they are human actions that take their meaning from the language-game in which they occur. There is no further analysis possible. Understanding first person reports simply means sharing in that form of life.

The 'picture' of a stimulus-response relationship between a private event and a first person report, it is concluded here, is as misleading in terms of reflexive problems as is the 'picture' of sensations, etc. as mental entities. At the level of the individual it is confused to think that there is a private stimulus and then a response to it. There is only meaningful human action.

Perhaps the most significant thing to come from giving up the idea that first person reports are responses to 'private stimuli' is the breaking of the circle of determinism in radical behaviourism. If the argument is accepted that private events cannot be successfully understood as 'private stimuli', then entry into the world of grammatical possibilities is unavoidable. And this world is not ultimately 'causal' or 'deterministic'. Rather, it is phenomenal. In a phenomenal world 'meaning' is not, to misuse a comment by Skinner (1974, p. 90), properly regarded as a property of a response or a situation *or of the controlling contingencies that are responsible for both the topography of*

behaviour and the control exerted by stimuli (See Chapter 2, Section 2.2.1 for the original quote). 'Meaning' is not a property of anything. It comes from the inevitability of participating in life.

This retreat from determinism need not be understood as a mortal wound in the side of radical behaviourism, however. It is quite possible to reconceive many behavioural principles in terms of language-games. For example, the concept of 'control' may seem to depend entirely on some notion of determinism. But even this concept can be understood quite clearly without determinism -and without denying that control of human behaviour is possible.

Finch (1977) commented that one aspect of games is that they have a *point* (pp. 77-78). But, importantly, this point is completely self-contained in the language-game. As Finch (1977) put it;

There must be no further *raison d'être* for the language-game; it must be done for its own sake, or we will not be able to see its formal nature. (p. 78).

The control that the *consequences* of behaviour seem to exert on behaviour is closely related to the *point* of a language-game. That is, in its formal sense a language-game can be carried out correctly or incorrectly and there is always the possibility of success or failure. By understanding the point of a language-game it then becomes possible to alter the 'rules' of the game in order to manipulate or control the behaviour of a person 'playing' the game. The fact that behavioural control always seems possible, at least in theory, is a reflection of the fact that it is always possible to see language-games in their formal aspect as having a point.

So, in summary, the consequences of behaviour can be assimilated to the point of a language-game. But it should be re-emphasized that it is not that language-games have points as part of their *nature*. Rather, it is just that it is *grammatically* possible to see that aspect of language-games.

In passing, it might be possible to argue that the language-games played by children and the mentally handicapped tend to be 'primitive' (P.I. 5). Now, it may be that the point of a 'primitive' language-game is particularly transparent. If this were so behavioural control would be easier to achieve with children and the mentally handicapped than with 'normal' adults.

Presumably, the experience of behavioural scientists would reveal how true this is. However, there is a danger here of trying to construct a developmental thesis concerning language-games. Such a thesis should, of course, be avoided as language-games are not theoretical entities (See Chapter 4, Section 4.3).

What is important to understand is that despite the (grammatical) possibility of controlling people's behaviour this does not mean to say that people's actions are *determined*. Or, to put it another way; determinism is not like an outside force that drives people along. From this perspective human actions are not determined by mechanisms, contingent laws or by the process of differential survival used in the 'Darwinian' type of causality that Skinner seems to prefer (See Chapter 2, Section 2.2.3). The possibility of control, instead, comes from understanding and participating in language-games. It is directly analogous to 'controlling' the behaviour of a field full of rugby players by kicking the ball down one end of the field and having them 'magically' run after it.

In *Beyond Freedom and Dignity* Skinner (1971a) argued against the notion of 'autonomous man' and for viewing human behaviour as determined. In contrast, the present Wittgenstein-inspired perspective manages to avoid determinism without yielding to the temptation of postulating causal agent selves. When language and phenomena are understood grammatically there is no room for an autonomous agent who is in the position of *using* language. Language, for Wittgenstein, might be like a tool-box full of tools (P.I. 11) but using the tools is not subject to the will (Finch, 1977, p. 77). Using the 'tools' must simply be something that people do since explaining why the 'tools' are used in terms of causal agent selves or even determinism is just using more 'tools'.

A further aspect of the philosophy of radical behaviourism that can be understood from the present perspective is the status of predictions. The conclusion drawn in Chapter 2, Sections 2.5.3 and 2.5.4 was that, in its own terms, predictions made from a behavioural analysis predict nothing in particular. The prediction, for example, that 'effectiveness' will be accepted as a criterion of truth, it was argued, does not predict what topographical types of behaviour might survive. This inability for a behavioural analysis to make predictions that have 'substantive' content can be seen as reflecting

the fact that *ultimately* the use of words -such as 'effective'- is not determined by the presence of a referent that is independent of language.

Concepts such as 'stimulus' and 'response' can be understood in a similar way to the concept of 'control'.

Perhaps one of the commonest criticisms of the behaviourist approach in psychology is that it often fails to provide a thorough understanding of the 'meaningfulness' of human behaviour. And, in practical situations behavioural analysis can often seem far too clumsy and coarse to recommend it as a course of action. For example, the single-minded attempt to reinforce or extinguish a particular behaviour may generate problems in some related area of a person's life. Or, behaviour modification may be attempted with a far too simplistic view of the contingencies maintaining behaviour. This problem is exacerbated by the ability of people to see ways of gaining reinforcement without changing their 'target' behaviour.

Of course, none of these criticisms is substantive. That is, they need not be seen as reflecting a deficiency in the *behaviourist* approach as such. Rather, they could be interpreted as 'deficiencies' in the approach of individual behaviourists. For example, such problems could be said to be due to an insufficient emphasis on determining the baseline contingencies that are operating.

The present view helps reveal why such criticisms can be made. Only by having a clear understanding of the language-games being 'played' in a particular situation, it is argued here, can the behaviourist identify the appropriate contingencies of reinforcement supporting a behaviour. This derives from the view that 'seeing' contingencies is best seen as a grammatical possibility and not as something that is itself produced by contingencies of reinforcement. Asserting that such 'seeing' is produced in turn by contingencies of reinforcement is an act of unnecessary obeisance to the doctrine of determinism. ('Unnecessary' because nothing but reflexive paradox and polemical rhetoric is lost by abandoning determinism.) And it is an act which ignores the unavoidable meaningfulness of all human action.

Day (1969b) stated that;

For Skinner, natural controlling contingencies are observed to take place. Yet

the perception in this is not totally trusted:
the disposition is there to regard whatever is
seen as dependent upon a previous history of
reinforcement. (p. 505).

It is suggested here that this 'disposition' simply goes too far when it is raised to the level of philosophy. If clarity of understanding is to be sought then this disposition too should be seen as a language-game and not as something that has resulted deterministically from a history of reinforcement.

Since consequences are an aspect of language-games -an aspect that is related to the *point* of language-games (see above)- the contingencies supporting a behaviour can only be recognized by understanding a particular language-game. And, 'understanding' a language-game means being able to move around in it. Identifying inappropriate contingencies of reinforcement is just a reflection of failing to identify the language-game being 'played' or perhaps being unable to play it. Thus, the prediction could be made that someone who is successful at behaviour modification in practical settings will be someone who is experienced in the many varieties of language-games and their subtle aspects as well as the relationships between them (See Section 5.3.3, above, on applying theories understood as language-games). In fact, without at least *some* understanding of language-games it would be impossible even to begin the task of behaviour modification.

One final point mentioned in Chapter 2, Section 2.5.4 concerned Skinner's value of 'survival'. Ultimately, all behaviour is judged, according to Skinner, by whether or not it survives. However, even this value, it is suggested here, cannot be considered a final or ultimate value. This is because concern for survival must be embedded in a language-game and all language-games are on the same level -which, of course, is part of the grammar of the term 'language-game'.

It would be a complete misunderstanding of the present approach to think that language-games are the kinds of things that compete in a race for survival. For trying to describe the *nature* of language-games in this way would only involve another language-game. If this were possible it would mean that no progress in understanding the issues of reflexivity is made by using the concept of the 'language-game'. Only grammatical points can be made about language-games.

There can be no explanation for why a language-game emerges or why it fades away. This is one respect in which language-games are not like cultural practices or social facts. There is a language-game for describing particular language-games ('philosophy') but there is no language-game for explaining language-games (See Chapter 4, Section 4.4). This may seem unfortunate as when Ackermann (1988) lamented the fact that there is no social or political side to Wittgenstein's philosophy and that he provides no forms for the resolution of social and language conflicts (p. 222). Ackermann (1988) went on to say;

Perhaps the legacy of Wittgenstein has run thin, perhaps it has turned into the hermeneutical problems of his texts or has flowered in movements inspired by his insights but grafted into the service of alien goals, because the resolution of genuine conflict in our language and in our lives was not allowed a substantial place in the direction of his thought. (p. 224).

But to feel disappointed at these apparent omissions is to misunderstand the 'grammatical perspective'. For the whole point of this perspective is to show that conflicts are not resolved in the way that people, and philosophers in particular, would like them to be resolved. Conflict can never finally be resolved by the rightness of argument, which is no doubt why Wittgenstein wanted to avoid theorizing in philosophy. Rather, it is always resolved by seeing in new or different ways. Wittgenstein's claims that he wants not to change people's opinions but to change what they do (See Chapter 4, Section 4.1, above) are best seen in this light. By enabling people to see in different ways conflict can be resolved -or at least it becomes unimportant.

In conclusion, then, perhaps it could be said that all that 'survives' in the long run is seeing in new ways.

5.3.7.2 Conclusion: Reflexivity and Radical Behaviourism

In the preceding discussion it was suggested that the reason radical behaviourism finally fails to deal with the problem of reflexivity is because of its unnecessary insistence on the doctrine of determinism. It may seem extreme to advocate the abandonment of this doctrine as it has long been

considered to be a founding assumption of scientific endeavour. However, nothing is lost by this strategy since behaviour modification, for example, still remains possible. The difference is just that it is now seen as *grammatically* possible rather than *necessarily* possible, and stemming from the presumed deterministic nature of the world.

It was also argued that there is nothing ultimate about the value of 'survival' since concern for survival exists only in a language-game. Values, as has already been discussed (See Section 5.3.2, above), are not ultimately justified but are founded in ungrounded action.

There is no doubt that the similarities noted between the philosophy of Wittgenstein and Skinner's radical behaviourism exist (See, for example, Day, 1969a; 1969b; Costall, 1980). However, despite this congruence in outlook Skinner failed to accept the final consequences of his position and so did not follow Wittgenstein into the world of grammar. In much the same way, and as already noted in Section 5.3.1.2, above, Williams (1985) suggested that cognitivists such as Fodor and Stich conceded Wittgenstein's arguments without drawing his conclusions. This reluctance on the part of Skinner, Fodor and Stich no doubt demands further examination. However, in the following and final chapter of this study a new understanding of the activity of psychology will be presented in a way that will hopefully allay any fears that might be underlying such reluctance.

CHAPTER SIX

6 GENERAL CONCLUSIONS: REFLEXIVITY AND PSYCHOLOGY

6.1 DISCUSSION

If an historical account of scientific psychology were to be given its advent might be explained in terms of a growing frustration with philosophy. Seemingly caught in endless debate over fundamental questions about the nature of knowledge, people and human society, philosophy, to some, must have paled next to the clear and practical successes of science. Whether fanciful or not this speculative reason for the emergence of a science of psychology helps to explain why the problems of reflexivity have permeated present day psychology. For the form of many of the questions of interest to 'traditional' philosophers is inherently paradoxical and essentially reduces to what has been called in this study the phenomenon of reflexivity. So, in trying to answer questions similar to those posed by 'traditional' philosophy psychology has adopted more than a little of 'traditional' philosophy itself.

The concept of 'knowledge' can be given as an example of one of the problematic aspects of 'traditional' philosophy embraced by psychology. 'Knowledge' has most often been viewed as a *reflexive* concept in the sense that a 'subject' knows/ observes/ examines/ *reflects on* an 'object'. Unfortunately for the prospects of a scientific psychology, science is in no

better shape for dealing with reflexive concepts than is 'traditional' philosophy. Fundamentally, this is because science and philosophy are equivalent insofar as they are only a *part* of human activity. So, by attempting to *causally* explain reflexive concepts science must do the impossible and reach beyond itself in much the same way that a philosophical theory must reach beyond itself in trying to *logically* explain reflexive concepts.

The most important thing to notice in the example of the concept of 'knowledge' -and in fact all such reflexive concepts- is that the phenomenon of reflexivity is being treated as if it were a *psychological* process or ability. It is *this* insight that is the clue to disentangling all of the complex problems associated with the issues of reflexivity as they have been understood in this study.

This insight should not be that surprising since, as has already been discussed in Chapter 4, Section 4.1, above, Hilmy (1987) persuasively argued that the central change between Wittgenstein's 'Early' and 'Late' philosophy stemmed from Wittgenstein's growing realization that he had allowed himself to view concepts such as 'meaning' and 'understanding' in just such a restricted 'psychological' or, more precisely, *metalogical* way. In fact, it was the implicit idea that such concepts refer to some hidden *psychological* processes or states that resulted in the transcendental view of logic in the *Tractatus*. That is, it was only because 'meaning', 'understanding', etc. were thought to refer to a psychological hinterland behind and beyond words and language that Wittgenstein had to finally conclude that all talk of logic must lack determinate sense. And this is why propositions of logic, and the *Tractatus* itself, were paradoxical in that they tried to say with sense what cannot be said with sense.

Therefore, consistent with this insight and with the overall approach taken in this final chapter the following suggestion can be made;

The phenomenon of 'reflexivity' should not be understood metalogically, that is, as a psychological process. Instead, 'reflexivity' is best understood grammatically.

Most of the reflexive dilemmas and paradoxes referred to in this study hinge, it is claimed here, on viewing 'reflexivity' in this metalogical way.

However, it is realized that relinquishing the metalogical approach has been a hard enough pill for philosophers to swallow so it is not likely to be any easier for psychologists. In fact, the enduring commitment to determinism and the belief that science has to be about causal explanation -if it is about anything- may in itself decide many psychologists against taking the medicine.

But despite this potential reluctance on the part of psychologists there may still be some polemical worth in outlining the advantages of a grammatical view of 'reflexivity'. In order to do this it will be expedient to take another look at the comments made by Margolis (1989) which have already been quoted in the Introduction to this study (See Chapter 1, Section 1);

Psychology is a reflexive discipline, however cleverly it may camouflage its practice in surveys and experiments. The observers and observed are one. All the human sciences are infected with that benign disease. Hence, on a reasonable theory, even the physical and formal sciences owe their objective standing to a steady orderliness perceived within the flux of the other. It is that reflexiveness, of course, that accounts for the otherwise extraordinary speculative leap that connects the fate of our theories of persons and selves to the fortunes of the largest philosophical puzzles. (p. 329)

Now, if the "reflexiveness" Margolis (1989) speaks of here is understood as something along the lines of a 'psychological' fact, that is, if it is understood metalogically, the reflexive "disease" will not be so benign and will result in all the confusions and paradoxes discussed in this study. It is understanding reflexivity metalogically that in fact accounts for the "speculative leap" from theories about people to philosophical puzzles. Judging by the following remarks by Margolis (1989) it appears that some symptoms of malignancy are present in his account of reflexivity;

The reflexive nature of discovering our nature implicates the ontologized prejudice of doing so. We can hardly abandon that study: it permeates the most unlikely inquiry; and we can hardly correct for its intrusion: every would-be correction is

another instance of it, if any correction there be. Reflection, therefore -hardly reducible to the introspection and self-perception favored by canonical empiricists and rationalists- is at once a first-order and a second order undertaking. Every empirical statement of what man is is perceptibly encumbered by assumptions, however inchoate, of what it would be coherent and tenable to suppose are the conditions under which distributed such pronouncements may be responsibly put forward. There is enough in that admission to refute, globally, any disjunction between science and the legitimative reflections of philosophy that might pretend to secure the self-corrective autonomy of any merely first-order empirical inquiry. (p. 330).

Even though Margolis (1989) in this quote eschews the understandings of reflection posed by empiricists and rationalists there remains, by his own standards, a commitment to what could be called an 'ontology of reflexivity'. That is, the seriousness with which the phenomenon of 'reflexivity' is being treated suggests that for Margolis (1989) it is beyond dispute that reflexivity *does* permeate so much inquiry. Talk of "discovering our nature" and of "assumptions, however inchoate" "encumbering" empirical statements of "what man is" tend to reinforce this view of Margolis' (1989) commitment.

Despite the obvious depth in Margolis' (1989) understanding of the phenomenon of 'reflexivity' he remains caught in a reflexive trap concerning 'reflexivity' itself. It is a trap that is held tight by his insistence that the study of "our nature" cannot be abandoned and the implication that "our nature" includes a reflexive capacity. For this trap is identical to the fly bottle -referred to in the following remark made by Wittgenstein (1953)- that keeps the solipsist enclosed;

What is your aim in philosophy?-To shew
the fly the way out of the fly-bottle. (P.I. 309).

(That this is a reference to the solipsist is convincingly argued for by Finch (1977, p. 106)). The 'fly-bottle' that has trapped Margolis (1989) is the apparent impossibility of escaping from the *perceptible* "assumptions" and "ontologized prejudice" of theorizing. Just as solipsists believe that they are unavoidably confined by the constraints of their own private world Margolis

(1989) believes theorists are restricted by the apparent impossibility of being free of assumptions and prejudice.

The way out of this trap is already clear. The grammatical perspective treats the act of identifying assumptions and prejudice as a language-game having its own grammar. 'Assumptions' and 'prejudice', that is, are not seen as *explaining* theories and human action. Rather, -and simply- the way in which these terms are used is examined. There is an end to presuppositions and this becomes evident by realizing that 'presupposing' itself has a grammar.

In a sense freedom from the trap could be said to be gained by seeing that what is right with Margolis' (1989) point is the realization of the *immediacy* of human action. (It is the immediacy of action that seems to make the limitations unavoidable. They, as it were, cannot be defended against because they slip in *immediately* prior to any action that even a highly reflective person might take.) But this 'immediate action' is not something that is caused by 'assumptions' or 'prejudice' or, for that matter, 'history' - whether social *or* personal- *just because* it is 'too' immediate; and any talk of 'assumptions', etc. cannot do full justice to this immediacy. Action is, instead, completely unfounded (See Chapter 5, Section 5.3.2, above).

In this way even the phenomenon of 'reflexivity' can be freed from its 'superontological' shackles and seen grammatically in its own right as part of meaningful activity. 'Reflexivity', that is, can best be understood by viewing its *grammar* since even it must have a grammar. And this is also why *explanation* must be finally relinquished if human action is to be understood completely. In order to show that this is so a different view of what 'understanding' involves will be presented below. Trying to explain reflexivity obscures just that aspect of the grammar of the word that it is so important to see.

The alternative to this grammatical approach involves 'ontologizing' reflexivity by hypothesizing explanations for it. But this alternative continually misses the most important insight offered by the possibility of the act of reflection. This insight, gleaned from the reflexive act, is *not* that all theorizing and thinking is limited and constrained by 'assumptions', 'history' or even 'context', all of which can be unearthed by reflective thought -although it is, of course, quite tempting to draw this conclusion. And certainly, such a conclusion would be preferable to an unreflective

confidence in "the self-corrective autonomy of any merely first-order empirical inquiry".

However, there is a far more profound lesson to be learnt: The grammatical possibility of the act of reflection shows that the human world of meaningful action is always, and 'essentially', a world of *grammatical possibility*, and not of epistemological or ontological fixity. This is shown, as it were, by the simple fact that it is *possible* to discern, examine and question 'assumptions' and 'prejudices' no matter what theory or explanation is proposed. But to see that it is possible to reflect in this way on the assumptions of a theory should not force one to think of reflection as an almost mystical ability of the psyche (for this is simply a pointless regression into the language-games of epistemology and ontology). And, most importantly, it should not force one to conclude that human action is *determined* by the assumptions, etc. that reflection reveals.

There are important differences between the consequences that stem from each of these two conclusions. If the former conclusion is drawn then there is likely to be a call for theoretical plurality in the search to discover what people are like. That is, the production of more and more causal explanations will be encouraged in order to guard against the limitations of 'unreflective' explanatory theory.

However, if the second conclusion is drawn it follows that a complete understanding of people and human action is not, and *cannot* (this is a limit to be found in grammar), be given by any number of explanations. So, the attempt to provide explanatory theories, whether scientific or philosophical, can be abandoned before it begins. That is not to say that psychology should cease -or even that what has come to be called theorizing in psychology should end. Rather, what have so far been called psychological theories can now be seen as grammatical movements exploring the 'world of the possible'. To some degree this whole orientation towards psychological theories helps to answer Howard's (1985) speculation;

Consider what might occur if we viewed research in psychology as giving us knowledge regarding human *possibilities* rather than human realities or human necessities. (p. 262).

This portrayal of theories -and, in fact, thinking itself- is not unlike that proposed by Hooker (1982). For example, Hooker (1982) claimed;

The essence of a sense of the epistemic seems to me to lie in this sense of openness to development [a development that could be said to stem from reflective thought] at all levels in interaction with reality (the cosmos, the One-- whatever one wishes to label it). (p. 128. Square Brackets added).

And a way of capturing this sense is to;

...construe cognition as the exploration of possibility structures, to construe theories as hierarchically organised conjectures concerning possibility structures, and to construe systems of norms (expressing values) as conjectural theories. (p. 128).

Hooker's (1982) intuitions are in basic agreement with the approach explicated here. However, it is suggested that he is mistaken in his understanding of where this world of 'possibility structures' lies. The exploration of these 'structures' cannot be carried out by anything so psychological as cognition (unless, of course, 'cognition' were to be construed as 'thought' in the ordinary sense and use of the word rather than as something psychological). Rather, these 'structures' are none other than grammatical possibilities. Similarly, when Natsoulas (1978) commented that one way of accommodating psychological possibility is to view the world as something that is 'infinitely faceted' he was making the mistake of trying to place 'possibility' in the *world*. In contrast, if the arguments presented in this study are correct then 'possibility' must remain a *grammatical* phenomenon.

Furthermore, theories are not "conjectures" about 'possibility structures'. Instead, they actually *teach* grammatical possibilities insofar as they are only *understood* once one can make one's way about in the language-game involved. Of course, there is a difference between what might be called the language-game of theorizing and the language-game that a theory presents or, better, teaches.. But this difference is clarified in the notion that theories are part of the training in a language-game. It could be said that instead of training being achieved or caused by presenting somebody with a theory

about what has to be done the opposite is in fact the case. That is, training in a language-game is what a theory is. And of course there can be no *explanation* of training or teaching -the concept of 'training' just indicates that someone comes to play this language-game. There is no explanation of 'training' except in the quite ordinary sense of how people might describe how a particular instance of training was carried out.

There is a further interesting, but speculative, connection that could be made between the present approach and the writings of Hooker. When Hooker (1975) described global theories it is hard from the present perspective not to see this as an attempt to delineate the world of grammar - at least when global theories in psychology are considered. The comment can be made here that the concept of 'grammar' is as close as one is likely to come to a global theory in psychology. But, of course, as has been emphasized (Chapter 4, Section 4.3) grammar cannot be considered as a theoretical construct without misunderstanding the concept.

In an historical sense this role for psychological theorizing is quite appropriate. It was suggested in the purely speculative history proposed at the beginning of this chapter that modern scientific psychology began as an attempt to answer some of the traditional concerns of philosophy. In its turn this new formulation for psychology can be seen as once again addressing philosophical concerns, but now the concerns are of what could be called a 'Wittgensteinian' approach to philosophical problems.

One particular concern of this 'Wittgensteinian' approach, of course, is that the way in which psychological theories are *understood* should not interfere with, or be a distraction from, the attempt to gain a perspicuous understanding of meaningful human action. What follows from this concern is that *understanding* people involves something very different from *explaining* them. That is, from the present perspective 'understanding' does not stem from having an explanation that is like a theoretical 'picture' of what something is like. Rather, it is more like being able to find one's way about in a language-game (Ackermann, 1988, p. 185; Wittgenstein, 1953, P.I. 143ff.).

The importance of this view of 'understanding' cannot be stressed enough for it is the key to *understanding* the grammatical approach itself. An example of a case of 'understanding' should be helpful here. The grammatical approach is learnt in just the same way that counting is learnt.

If a child waited to understand some formula, rule or 'picture' to produce the series of counting numbers (1, 2, 3, 4, etc.) he or she would never get past '1'. At some point a step just *is* taken and this is not determined by any helpful 'picture' -either 'internal' or 'external'. The child could reflect for an eternity trying to 'understand' how to generate the next number.

Therefore, to 'understand' reflexivity grammatically -that is, in a non-metalogical way- no 'explanation' of it need be given as this would be to treat reflexivity metalogically as a special kind of factual process or entity. Instead, by surveying the ways in which the term 'reflexivity' is used in language it becomes possible to 'find one's way about' in language-games that involve it. Ceasing to insist that a theory or 'picture' of reflexivity is needed in order to understand it is part of learning how to approach phenomena grammatically. This is, as it were, an instruction -in a process of training- about the grammar of the grammatical approach to reflexivity.

'Reflexivity' is demystified by viewing it grammatically. For example, a grammatical examination reveals that the meaningful act of reflection is not itself reflexive. That is, if something is reflected upon it is certain (it is part of the grammar of 'reflexivity') that the act of reflecting is not itself being reflected upon. In this way 'reflexivity' can be seen (in a sense 'observed') in its own right as a meaningful part of human activity instead of as some near-transcendent act forever paradoxically beyond what is meaningful and what can be understood. By examining its grammar 'reflexivity' becomes just another meaningful human activity.

Perhaps now it is an appropriate time to clarify why 'language-games', 'forms of life' and 'grammar' are not things that can be *explained*. 'Language-games', for example, are not facts with determinate forms that could be produced or caused -and *this* is part of the grammar of 'language-games'. 'Understanding' the term 'language-game' involves *being able to carry on* in *this* language-game and does not involve having a theory or 'picture' of a language-game. It would be to miss the point entirely if the complaint were made that "I cannot continue on in this language-game because I do not know what a language-game is!". The proper reply to this complaint would be, perhaps, "Don't worry about not knowing what a language-game is, just *look* and *see* how the word is used and you will pick it up".

Perhaps the most unfortunate and confusing consequence of seeing explanatory theories as 'pictures' or representations of the world is that this 'picture' often results in the belief that theoretical knowledge is *limited* -for a 'picture' is something that is, as it were, bounded by its 'frame'. When this belief is combined with a metalogical view of reflexivity theories come to be seen as limited pictures *generated* by the reflexive act. Thus, paradox is ensured. All knowledge is theoretical; there is more than one theory (an observation suggested by the metalogical, generative view of reflexivity); therefore, each theory must inevitably be a limited monad; the only escape from each monad is by the reflexive act; But finally, and fatally, all knowledge of reflexivity is similarly a monadic 'picture'. By following this 'picture' through to its conclusion every 'picture' or theory seems to be undermined and degenerates into chaos -except of course for the 'picture' of chaos.

'Understanding' is more a case of 'being able to find one's way about in a language-game' than a case of having a theoretical 'picture' of what something is like. For when theories are seen as 'pictures' there is always the realization that they could be different pictures -and even then any 'picture' could be applied in more than one way depending on what 'assumptions', etc. were operating. This produces the fear, induced by reflexive concerns, that theoretical knowledge is relative which, in turn, encourages the call for theoretical pluralism. But when theories are indissolubly linked to language-games and the process of teaching language-games, it becomes senseless to speak either of limits or of meaningless chaos.

It could be said in conclusion that psychological theories reveal just what they appear to show -and there is nothing more to be said. The knowledge they provide is just what people who understand the theories know. This may not seem much but really it is everything and it is impossible that anything more should be needed.

Therefore, by accepting that even the phenomenon of 'reflexivity' must be understood *grammatically* -if it is to be understood clearly and non-paradoxically-, the immediacy and the 'reality' of human action, and life itself, can be salvaged from the surreal ghostland of 'objectivity' and 'theoretical knowledge'.

Whatismore, the grammatical perspective thrusts psychologists, and theorists in general, back into the 'real' and ordinary world. Thus, it

undermines in a most fundamental way any elitist 'otherworldliness' that might be encouraged by a confused 'intellectualism' and, in particular, a cultic approach to science. That is, it provides, hopefully, a coherent account of what might be inspiring the following comment by Margolis (1989) -and perhaps a reason for agreeing with it at least in a limited sense;

One can no longer just state one's theory flatly, the theory one means to defend against all competitors, meaning by that that the world will in due course yield the confirming evidence of its timeless truth. We are more interested in the risky process of *theorizing viewed as a way of actually existing*, of generating scientific and philosophical claims within a flux that denies the fixities of self and world -on the easy assumption of the reliability of which our shifting theories were once thought to be straightforwardly tested. Theorizing and theorized are one: the assessment of theories is the work of the theories assessed; and, for the purposes of dispute, an independent world and a neutral judge are doubtful creatures of argumentative invention. (Preface, pp. x-xi. Emphasis added).

It is now possible to look again at the three issues of reflexivity as they were outlined in the Introduction to this study.

(1) *Reflexivity as a property of psychology's subject matter.*

The recommendation that the phenomenon of 'reflexivity' should not be understood as a psychological process obviously prohibits the view that psychological subjects have a reflexive capacity akin to a psychological ability. The ability to reflect is a grammatical possibility and must remain purely in the grammatical world. Which is just as well as this more than anything else guarantees the 'reality' of the ability to think and reflect -a 'reality' also argued for by Margolis (1989). Such a 'reality' is, of course, *internal* to language and human

forms of life. But this is exactly *why* it is 'real' as opposed to hypothetical or theoretical.

In other words, the fact that it is possible to reflect even on a theory that postulates people as reflexive active agents -and thus opening the door to seeing people in other ways- signals that the 'property' of reflexivity constitutes a *grammatical* point and not a *theoretical* point.

This point is very closely related to the fact that the Cartesian 'subject' has been banished. For the Cartesian 'subject' is actually a theoretical construct. So, if reflexivity is seen as a property of *this* 'subject' the reality of the act of reflection becomes limited to the context of this Cartesian *theory* of the 'subject'. In contrast, seeing reflexivity as a *grammatical* possibility allows the act of reflection -that is, reflective thought- to always be a *real* possibility in a way that a *theoretical* possibility can never be. (And, of course, this is a comment on the grammar of the terms 'grammatical' and 'theoretical'). Reflective thought, therefore, is placed where it should be placed -as a meaningful and real part of a human form of life.

(There is an interesting sense in which the concepts of 'reflexivity', 'grammar' and 'intelligence' relate. For an intelligent person could be said to be someone who reflects a lot on 'ideas'. This process could now be understood as the exploration of grammar and grammatical possibilities. Although the details will not be considered here -and, in fact, have not been thoroughly thought out- this possible connection between 'intelligence' and 'grammar' may help to understand why the construct of 'intelligence' has been so difficult to define in psychology. The pre-factual status of grammar may make it grammatically impossible to define intelligence.)

(2) *Reflexivity of psychological explanation* .

The particular issue in this regard is whether psychological explanations can give a coherent account of their own production. From the preceding discussion it should be no surprise that the conclusion to be drawn here is that no psychological explanation can coherently account for the possibility of being able to reflect on the explanation itself.

The reasons for this are basically the same as those given in (1) above. Firstly, 'reflexivity' is well and truly situated in the realm of the grammatical and as such it is not an appropriate 'object' for explanation. This is connected to the arguments given in Chapter 4, Section 4.3 concerning the non-factual, or pre-factual status of 'grammar', 'language-games' and 'forms of life'.

Secondly, explanations -whether causal or 'logical'- are inevitably 'internal' to language, which is to say that their grammar is such that there can be no explanation of grammatical aspects of language such as 'reflexivity'.

Viewing psychological theories as 'language-games' sheds some light on the role of 'context' in psychological explanations. 'Context' can now be understood as the grammar of the language-games involved. As such it is in no way a factual matter so the concept cannot be reduced to the 'environment' or 'situation'. It is suggested here that a similar conceptualization of 'context' was being sought by Jaeger and Rosnow (1988) when they commented;

For contextualists, the context is an integral part of human actions, to be sure. An act or event cannot be said to exist independently of the act or event to which it refers... These contexts are not orderly or invariant external entities that can be pulled apart and the separate parts specifically labelled and finally

reduced to unilinear causal patterns. A change in context can alter the meaning, and consequently, the identity (or texture) of an act, as much as change in the elements (or strands) of an act can instigate changes in its context. (p. 66).

However, it is claimed here that such an understanding of 'context' cannot be achieved in a coherent manner isolated from the overall approach of language-games, forms of life and grammar as presented by Wittgenstein (1953) and described in this study.

(3) *Reflexivity in the production and evaluation of psychological theories* .

The difficulty of trying to independently evaluate psychological theories is perhaps the most central concern of this study. In rather different terms Margolis (1989) examined this same difficulty under the heading of "Enculturing Psychology" (pp. 329-370).

When psychological theories are themselves understood as language-games the question ceases to be one of *independent* evaluation. That is, evaluation cannot *finally* be achieved by applying a prescriptive set of criteria -even though, in a contingent sense, this may be what in fact happens. Rather, evaluating a theory - like all human action- is an unfounded ethical act. That is, choosing one theory over another is a quite ordinary, and quite real, meaningful act in life. At some point the choice is made (or is not made).

This approach to evaluation should not, of course, be confused with philosophical pragmatism. Even pragmatic reasons cannot found an act.

To say that an evaluative choice is unfounded is not to say that evaluation is hopeless. All that is implied is that evaluation takes place in a language-game and

form of life. Therefore, the process of evaluation need not be concerned with establishing some transcendent viewing platform but can instead focus on the actual point of making the evaluation. And the point is of course given by the point of the language-game. In this way any disagreements regarding the point of making an evaluation will surface and can in turn become the focus of discourse. This, instead of their remaining hidden, obscured behind the pursuit of ultimate evaluative criteria.

The attempt by Margolis (1989) to involve Wittgenstein's notion of a 'form of life' in preliminary moves to try to explain the enculturation of psychology is misplaced. For it is an attempt to, as it were, 'descend' from the grammatical viewpoint. It is clear that Margolis (1989) himself saw this vulnerability in his account. In the 'Epilogue' he commented;

Our best thought is transient, risked in the extreme. And yet we press on in the direction of closure and invariance and universality. The effort is not illegitimate, though what it finds is doomed to be replaced - discontinuously and incommensurably. We content ourselves with the salencies of our perceived world that serve us as best depictions of what we imagine are the underlying fixities of the real world. (p. 371).

Of course, the effort is *not* illegitimate -but perceiving it in terms of an irresistible drive towards closure and universality is part of a confusion. The effort, and Margolis' (1989) work, have their place in the language-games and forms of life in which they *do* occur. That is, amongst those who are concerned about understanding the problems brought into the social sciences by the phenomenon of reflexivity.

And after all, the lesson of the 'effort' is not about a *drive* towards closure. It is about, perhaps, a very real but ultimately unnecessary *fear* of openness. Like fledglings perched on the edge of the nest there remains, at the last, a hesitancy to leave the solidity of the nest (the world of explanations) and exchange it for the freedom of flight (the world of possibility/grammar).

There is an end to explanation. But this is not an attempted slight on explanatory theory. Instead it is a way of seeing explanations more clearly -to allow even explanation the honour of being seen as it is.

It is the final conclusion of this study that there is no hope that psychology will ever explain people to the extent that their reflexive 'capacity' would also be explained. But for two reasons this should not lead to disappointment. Firstly, -and perhaps of least consolation-, the fact that even traditional philosophizing cannot meet the challenge of reflexivity may help to alleviate any feelings of failure in this regard.

Secondly, -and immeasurably more important-, by demonstrating that even scientific attempts to explain human behaviour can never be the last word on understanding people, psychology, by its very presence, acts as a constant reminder, signposting an awesome freedom. A freedom that is immediate and total. A freedom to live beyond any idea or conception of what it is like to be human. In short, a freedom to live in *just* that world that one finds oneself -without ultimately having to bring into question either that world or oneself. Acting as such a signpost is no small role for psychology to play.

There is a third reason why psychologists should not be disappointed by the final conclusion of this study. When understood as language-games psychological theories provide people with 'grammatical moves' that can be made in life. That is, they can provide grammatical insights into the ways people act in particular circumstances -serving to teach people about more and more possibilities of action. However, without the caveat of the final conclusion drawn in this study psychology will always appear to close off the one possibility that it cannot close off -the possibility of 'possibility' that can be found in the world of grammar.

The (almost) final word will be given to Ackermann (1988), here quoted slightly out of context;

We *participate* in human life; we do not view it as we view a film, from the outside. Our participation in life allows us to understand a film and also to understand language ... (p. 203).

...and also to understand ourselves.

6.2 SUMMARY OF MAIN CONCLUSIONS

The arguments presented in this study -and indeed the various areas of psychology examined- may appear to be quite diffuse and sometimes even unrelated. However, whether they appear this way or not they all converge on the following points:

- (1) Accepting that 'reflexivity' is a part of meaningful human activity presents insurmountable difficulties for the overall coherence of explanatory theories in psychology.
- (2) Because of (1) the phenomenon of 'reflexivity' must be understood grammatically and not *metalogically*.
- (3) There is therefore an irredeemably grammatical 'flavour' to theorizing in psychology -given the understanding of 'grammar' presented here (See Chapter 4, Section 4.3).
- (4) Given (1), (2) and (3) it is in the realm of psychology that science merges back into what, for want of a better word, could be called the 'ordinary' world.

REFERENCES

- Aanstoos, C. M. (1985). Psychology as a human science. *American Psychologist*, 40, 1417-1418.
- Ackerman, R. J. (1988). *Wittgenstein's City*. Amherst: University of Massachusetts Press.
- Armstrong, D. M. (1980). The nature of mind. In N. Block (Ed.) *Readings in Philosophy of Psychology*, Vol. 1. Cambridge, Massachusetts: Harvard University Press.
- Ayer, A. J. (1985). *Wittgenstein*. London: Wiedenfield and Nicolson.
- Ayers, M. R. (1968). *The Refutation of Determinism: An Essay in Philosophical Logic*. London: Methuen.
- Baker, L. R. (1981). Why computers can't act. *American Philosophical Quarterly*, 18, 157-163.
- Baker, L. R. (1984). On the very idea of a form of life. *Inquiry*, 27, 277-289.
- Barrett, W. (1978). *The Illusion of Technique. A Search for Meaning in a Technological Civilisation*. Garden City, New York: Anchor Press/Doubleday.
- Bartlett, S. J. (1986). Philosophy as ideology. *Metaphilosophy*, 17, 1-13.
- Begelman, D. A. (1978). Tombstone polishing and Wittgenstein: A rejoinder to Johnson. *Behaviorism*, 6, 221-228.
- Bhaskar, R. (1975). *A Realist Theory of Science*. Leeds: Leeds Books.
- Block, N. (1980). What intuitions about homunculi don't show. *The*

Behavioral and Brain Sciences, 3, 425-426.

Bruner, J. (1973). *Beyond the Information given: Studies in the Psychology of Knowing*. J. M. Anglin (Ed.) New York: Norton.

Buss, A. R. (1978). The structure of psychological revolutions. *Journal of the History of the Behavioral Sciences*, 14, 57-64.

Churchland, P. M. (1985). Reduction, qualia and the direct introspection of brain states. *The Journal of Philosophy*, 82, 8-28.

Costall, A. (1980). The limits of language: Wittgenstein's later philosophy and Skinner's radical behaviorism. *Behaviorism*, 8, 123-131.

Coulter, J. (1983). *Rethinking Cognitive Theory*. London: Macmillan Press.

Crawford, M. P. (1985). Psychology, technology and professional service. *American Psychologist*, 40, 415-422.

Czubaroff, J. (1988). Criticism and response in the Skinner controversies. *Journal of the Experimental Analysis of Behavior*, 49, 321-329.

Davies, P. C. W. (1981). Time and reality. In R. Healey (Ed.) *Reduction, Time and Reality*. Cambridge: Cambridge University Press.

Dawkins, R. (1978). *The Selfish Gene*. Frogmore, St Albans, Hertfordshire: Granada.

Day, W. F. (1969a). Radical behaviorism in reconciliation with phenomenology. *Journal of the Experimental Analysis of Behavior*, 12, 315-328.

Day, W. F. (1969b). On certain similarities between the *Philosophical Investigations* of Ludwig Wittgenstein and the operationism of B. F. Skinner. *Journal of the Experimental Analysis of Behavior*, 12, 489-506.

- Dennett, D. (1979). On the absence of phenomenology. In D. F. Gustafson & B. L. Tapscott (Eds.) *Body, Mind and Method*, pp 93-113.
- Dennett, D. (1980). The milk of human intentionality. *The Behavioral and Brain Sciences*, 3, 428-430.
- Dixon, R. A. (1983). Theoretical proliferation in psychology: A plea for sustained disunity. *The Psychological Record*, 33, 337-340.
- Eccles, J. C. (1980). A dualist-interactionist perspective. *The Behavioral and Brain Sciences*, 3, 430-431.
- Engelmann, P. (1967). *Letters from Ludwig Wittgenstein with a Memoir*. Oxford: Blackwell.
- Falk, A. E. (1987). Reference to myself. *Behaviorism*, 15, 89-105.
- Feldman, J. B. (1985). The work of Milton Erickson: A multi-system model of eclectic therapy. *Psychotherapy*, 22, 154-162.
- Finch, H. (1971). *Wittgenstein - The Early Philosophy: An Exposition of the 'Tractatus'*. New Jersey: Humanities Press.
- Finch, H. (1977). *Wittgenstein - The Later Philosophy: An Exposition of the "Philosophical Investigations"*. New Jersey: Humanities Press.
- Flanagan, O. J. (1980). Skinnerian metaphysics and the problem of operationism. *Behaviorism*, 8, 1-13.
- Fodor, J. (1975). *The Language of Thought*. New York: Thomas Y. Crowell.
- Fodor, J. A. (1980). Methodological solipsism considered as a research strategy in cognitive psychology. *The Behavioral and Brain Sciences*, 3, 63-109.
- Fodor, J. A. (1981). The mind-body problem. *Scientific American*, 244,

124-132.

- Garfinkel, A. (1981). *Forms of Explanation. Rethinking the Questions in Social Theory*. New Haven: Yale University Press.
- Gergen, K. J. (1979). The positivist image in social psychological theory. In A. R. Buss (Ed.) *Psychology in Social Context*. New York: Irvington.
- Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275.
- Gergen, K. J. (1986). Elaborating the constructionist thesis. *American Psychologist*, 41, 481-482.
- Gergen, K. J. (1988). Knowledge and social process. In D. Bar-Tal & A. W. Kruglanski (Eds.) *The Social Psychology of Knowledge*. Cambridge: Cambridge University Press.
- Germana, J. (1977). Wittgenstein/WITTGENSTEIN. *Behaviorism*, 5, 61-62.
- Gibson, J. J. (1966). *The Senses Considered as Perceptual Systems*. Boston: Houghton-Mifflin.
- Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Boston: Houghton-Mifflin.
- Giorgi, A. (1985). Theoretical plurality and unity in psychology. *The Psychological Record*, 35, 177-181.
- Globus, G. G. (1984). Can methodological solipsism be confined to psychology? *Cognition and Brain Theory*, 7, 233-246.
- Globus, G. G., Maxwell, G., & Savodnik, I. (1976). *Consciousness and the Brain: A Scientific and Philosophical Inquiry*. New York: Plenum Press.

- Goldstein, L. (1983). Wittgenstein and the logico-semantic paradoxes. *Ratio*, 25, 137-153.
- Gould, S. J. & Lewontin, R. (1979). The spandrels of San Marco and the Panglossian Paradigm: A critique of the adaptationist programme. *Proceedings of the Royal Society*, B205, 581-598.
- Grounds, A. (1987). On describing mental states. *The British Psychological Society*, 60, 305-311.
- Haan, N. (1982). Can research on morality be "scientific"? *American Psychologist*, 37, 1096-1104.
- Haan, N. (1983). Replies to Leary, Houts and Krasner, Waterman, and Einhorn. *American Psychologist*, 38, 1256-1258.
- Hackenberg, T. D. (1988). Operationism, mechanism, and psychological reality: The second-coming of linguistic relativity. *The Psychological Record*, 38, 187-201.
- Harré, R. & Secord, P. F. (1972). *The Explanation of Social Behavior*. Oxford: Blackwell.
- Harré, R. (1974). Blueprint for a new science. In N. Armstrong (Ed.) *Reconstructing Social Psychology*. Harmondsworth: Penguin.
- Harré, R. (1979). *Social Being*. Oxford: Blackwell.
- Harré, R. (1983). *Personal Being*. Oxford: Blackwell.
- Harré, R. (1984). Social elements as mind. *British Journal of Medical Psychology*, 57, 127-135.
- Harré, R. (1989). Language games and the texts of identity. In J. Shotter and K. J. Gergen (Eds.) *Texts of Identity*. London: Sage.
- Harris, J. F. (1986). Language, language games and ostensive definition.

Synthese, 69, 41-49.

Harris, R. (1988). *The Language Machine*. Ithaca, New York: Cornell University Press.

Hayes, S. & Brownstein, A. (1987). Mentalism, private events and scientific explanation. In S. Modgil & C. Modgil (Eds.) *B. F. Skinner: Consensus and Controversy*. New York: Falmer Press.

Hayes, S. C. (1984). Making sense of spirituality. *Behaviorism*, 12, 99-110.

Heil, J. (1981). Does cognitive psychology rest on a mistake? *Mind*, 90, 321-342.

Heisenberg, W. (1958). *A Physicist's Conception of Nature*. London: Hutchinson & Co.

Henriques, J., Hollway, W., Urwin, C., Venn, C., & Wolkerdine, V. (1984). *Changing the subject: Psychology, Social Regulation and Subjectivity*. London: Methuen.

Hilgard, E. (1980). Consciousness in contemporary psychology. *Annual Review of Psychology*, 31, 1-26.

Hilmy, S. (1987). *The Later Wittgenstein: The Emergence of a New Philosophical Method*. Oxford: Blackwell.

Hineline, P. (1980). The language of behavior analysis: Its community, its functions and its limitations. *Behaviorism*, 8, 67-85.

Hocutt, M. (1985). The truth in behaviorism: A review of G. E. Zuriff, *Behaviorism: A Conceptual Reconstruction*. *Behaviorism*, 13, 77-82.

Hofstadter, D. R. (1979). *Goedel, Escher, Bach: An Eternal Golden Braid*. Harvester Press: Sussex.

- Hofstadter, D. F. (1980). Reductionism and religion. *The Behavioral and Brain Sciences*, 3, 433-434.
- Hooker, C. A. (1975). On global theories. *Philosophy of Science*, 42, 152-179.
- Hooker, C. A. (1982). Understanding and control: An essay on the structural dynamics of human cognition. *Man-Environment Systems*, 12, 121-160.
- Howard, G. S. (1985). The role of values in the science of psychology. *American Psychologist*, 40, 255-265.
- Hume, D. (1978). *A Treatise of Human Nature*. L. A. Selby-Bigge and P. H. Nidditch (Eds.) Oxford: Clarendon Press.
- Hunnings, G. (1988). *The World and Language in Wittgenstein's Philosophy*. Houndmills, Basingstoke, Hampshire: Macmillan Press.
- Husserl, E. (1960). *Cartesian Meditations: An Introduction to Phenomenology*. Translated by D. Cairns. The Hague: Martinus Nijhoff.
- Jackson, F. (1982). Epiphenomenal qualia. *The Philosophical Quarterly*, 32, 127-136.
- Jaeger, M. E. & Rosnow, R. L. (1988). Contextualism and its implications for psychological inquiry. *British Journal of Psychology*, 78, 63-75.
- Jaynes, J. (1976) *The Origin of Consciousness in the Break-down of the Bicameral Mind*. Boston: Houghton Mifflin.
- John, I. D. (1984). Science as a justification for psychology as a social institution. *Australian Psychologist*, 19, 29-37.
- Johnson, C. W. (1977). On Wittgenstein. *Behaviorism*, 5, 39-42.

- Kantor, J. R. (1984a). Scientific unity and spiritistic disunity. *The Psychological Record*, 34, 69-71.
- Kantor, J. R. (1984b). The relation of scientists to events in physics and in psychology. *The Psychological Record*, 34, 165-173.
- Katz, S. & Frost, G. (1979). The origins of knowledge in two theories of brain: The cognitive paradox revealed. *Behaviorism*, 7, 35-44.
- Kimble, G. A. (1984). Psychology's two cultures. *American Psychologist*, 39, 833-839.
- Kipnis, D. (1987). Psychology and behavioral technology. *American Psychologist*, 42, 30-36.
- Koch, S. (1981). The nature and limits of psychological knowledge: Lessons of a century *qua* "Science". *American Psychologist*, 36, 257-269.
- Krasner, L. (1978). The future and the past in the behaviorism-humanism dialogue. *American Psychologist*, 33, 799-804.
- Krasner, L., & Houts, A. C. (1984). A study of the "value" systems of behavioral scientists. *American Psychologist*, 39, 840-850.
- Kuhn, T. (1962). *The Structure of Scientific Revolutions*. Chicago: Chicago University Press.
- Leary, D. E. (1983). On scientific morality. *American Psychologist*, 38, 1253.
- Leary, D. E. (1984). Philosophy, psychology and reality. *American Psychologist*, 39, 917-919.
- Lee, V. L. (1985a). Some comments about unity in psychology. *The Psychological Record*, 35, 287-291.

- Lee, V. L. (1985b). Scientific knowledge as rules that guide behavior. *The Psychological Record*, 35, 183-192.
- Levy, L. H. (1984). The metamorphosis of clinical psychology: Towards a new charter as human services psychology. *American Psychologist*, 39, 486-494.
- Libet, B. (1985). Unconscious cerebral initiative and the role of conscious will in voluntary action. *The Behavioral and Brain Sciences*, 8, 529-566.
- Lichtenstein, P. E. (1980). Theoretical psychology: Where is it headed? *The Psychological Record*, 30, 447-458.
- Mandler, G. (1975). Consciousness: Respectable, useful and probably necessary. In R. L. Solso (Ed.) *Information Processing and Cognition*. New Jersey: Earlbaum.
- Manicas, P. T. & Secord, P. F. (1983). Implications for psychology of the new philosophy of science. *American Psychologist*, 38, 399-413.
- Manicas, P. T. & Secord, P. F. (1984). Implications for psychology: Reply to comments. *American Psychologist*, 39, 922-926.
- Margolis, J. (1989). *The Persistence of Reality. Texts Without Referents:: Reconciling Science and Narrative*. Oxford: Basil Blackwell.
- Marton, A. (1980). There are many modular theories of mind. *The Behavioral and Brain Sciences*, 3, 29.
- Marx, M. H. & Hillix, W. A. (1979). *Systems and Theories in Psychology*. New York: McGraw-Hill.
- Messer, S. B. (1985). Choice of method is value laden too. *American Psychologist*, 40, 1414-1415.
- Micheals, C. F., & Carello, C. (1981). *Direct Perception*. New Jersey:

Prentice-Hall

- Middleton, D., & Edwards, D. (1985). Pure and applied psychology: Re-examining the relationship. *Bulletin of the British Psychological Society*, 38, 146-150.
- Miller, G. A. (1980). Computation, consciousness, and cognition. *The Behavioral and Brain Sciences*, 3, 146.
- Moore, J. (1981). On mentalism, methodological behaviorism, and radical behaviorism. *Behaviorism*, 9, 55-77.
- Morawski, J. G. (1983). Hugo Münsterberg on the possibilities for psychology and society. *American Psychologist*, 38, 1259-1260.
- Mulaik, S. A. (1984). Realism, pragmatism, and the new philosophy of science for psychology. *American Psychologist*, 39, 919-920.
- Myers, J. G., & Tweney, R. D. (1983). Was Münsterberg a utopian? *American Psychologist*, 38, 1258-1259.
- Nagel, T. (1974). What is it like to be a bat? *Philosophical Review*, 83, 435-450.
- Natsoulas, T. (1978a). Residual subjectivity. *American Psychologist*, 33, 269-283.
- Natsoulas, T. (1978b). Toward a model for consciousness in the light of B. F. Skinner's contribution. *Behaviorism*, 6, 139-175.
- Natsoulas, T. (1980). The primary source of intentionality. *The Behavioral and Brain Sciences*, 3, 440-441.
- Natsoulas, T. (1981). Basic problems of consciousness. *Journal of Personality and Social Psychology*, 41, 132-178.
- Natsoulas, T. (1983). Perhaps the most difficult problem faced by

- behaviorism. *Behaviorism*, 11, 1-26.
- Neisser, U. (1976). *Cognition and Reality: Principles and Implications of Cognitive Psychology*. San Francisco: W. H. Freeman & Co.
- Neisser, U. (1979). Is psychology ready for consciousness? *Contemporary Psychology*, 24, 99-100.
- Observer (1971). Disunity in science: Inconcinnity in psychology. *The Psychological Record*, 21, 565-569.
- Observer (1982). Unity and disunity in science and in psychology. *The Psychological Record*, 32, 291-295.
- Paniagua, F. A. (1985). The relational definition of reinforcement: Comments on circularity. *The Psychological Record*, 35, 193-202.
- Paniagua, F. A. (1987). "Knowing" the world within the skin: A remark on Skinner's behavioral theory of knowledge. *Psychological Reports*, 61, 741-742.
- Parrott, L. J. (1983). Perspectives on knowing and knowledge. *The Psychological Record*, 33, 171-184.
- Putnam, H. (1982). Three kinds of scientific realism. *The Philosophical Quarterly*, 32, 195-200.
- Pylyshyn, Z. W. (1980). Computation and cognition: Issues in the foundations of cognitive science. *The Behavioral and Brain Sciences*, 3, 111-169.
- Rakover, S. S. (1983). In defense of memory viewed as stored mental representation. *Behaviorism*, 11, 53-62.
- Reese, H. W., & Fremouw, W. J. (1984). Normal and normative ethics in behavioral sciences. *American Psychologist*, 39, 863-876.

- Roback, A. A. (1917). The moral issues involved in applied psychology. *Journal of Applied Psychology*, 1, 232-243.
- Rogers, C. R., & Stevens, B. (1967). *Person to Person: The Problem of Being Human. A New Trend in Psychology*. London: Souvenir Press.
- Rorty, R. (1979). *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press.
- Rosenberg, A. (1986a). Intentional psychology and evolutionary biology: Part I: The uneasy analogy. *Behaviorism*, 14, 15-27.
- Rosenberg, A. (1986b). Intentional psychology and evolutionary biology: Part II: The crucial disanalogy. *Behaviorism*, 14, 125-138.
- Ruse, M. (1986). *Taking Darwin Seriously*. Oxford: Basil Blackwell.
- Sampson, E. E. (1983). Deconstructing psychology's subject. *Journal of Mind and Behavior*, 4, 135-164.
- Sampson, E. E. (1985). The decentralization of identity. Toward a revised concept of personal and social order. *American Psychologist*, 40, 1203-1211.
- Sampson, E. E. (1989). The deconstruction of the self. In J. Shotter & K. J. Gergen (Eds.) *Texts of Identity*. London: Sage.
- Schnaitter, R. (1984). Skinner on the 'mental' and the 'physical'. *Behaviorism*, 12, 1-14.
- Schnaitter, R. (1987). Behaviorism is not cognitive and cognitivism is not behavioral. *Behaviorism*, 15, 1-11.
- Schwartz, B., Schuldenfrei, R., & Lacey, H. (1978). Operant psychology as factory psychology. *Behaviorism*, 6, 229-254.

- Scriven, M. (1972). The philosophy of behavior modification. In C. E. Thoresen (Ed.) *Behavioral Modification in Education*. Chicago: Chicago University Press.
- Searle, J. (1979). Intentionality and the use of language. In A. Margolit (Ed.) *Meaning and Use*. Dordrecht, Holland: Reidel.
- Searle, J. F. (1980). Minds, brains, and programs. *The Behavioral and Brain Sciences*, 3, 417-457.
- Secord, P. F. (1984). Determinism, free will and self-intervention: A psychological perspective. *New Ideas in Psychology*, 2, 25-33.
- Seligman, D. B. (1976). Wittgenstein on seeing aspects and experiencing meanings. *Philosophy and Phenomenological Research*, 37, 205-217.
- Shapiro, M. B. (1985). A re-assessment of clinical psychology as an applied science. *British Journal of Clinical Psychology*, 24, 1-11.
- Shaw, R. & Bransford, J. (1977). *Perceiving, Acting and Knowing: Toward an Ecological Psychology*. Hillsdale, New Jersey: Earlbaum.
- Shaw, R. Turvey, M.T. & Mace, W. (1982). Ecological psychology: The consequence of a commitment to realism. In W. B. Weimer & D. S. Palermo (Eds.) *Cognition and the Symbolic Processes*, Vol. 2. Hillsdale, New Jersey: Erlbaum.
- Shotter, J. & Gergen, K. J. (1989). *Texts of Identity*. London: Sage.
- Sinha, C. (1982). Negotiating boundaries: Psychology, biology and society. In S. Rose (Ed.) *Towards a Liberatory Biology. The dialectics of Biology Group*. London: Allison & Busby.
- Skinner, B. F. (1938). *The Behavior of Organisms: An Experimental Analysis*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1945). The operational analysis of psychological terms.

Psychological Review, 52, 270-277.

Skinner, B. F. (1953). *Science and Human Behavior*. New York: Macmillan.

Skinner, B. F. (1957). *Verbal Behavior*. New York: Appleton-Century-Crofts.

Skinner, B. F. (1971a). *Beyond Freedom and Dignity*. Harmondsworth, Middlesex: Penguin.

Skinner, B. F. (1971b). A behavioral analysis of value judgments. In E. Tobach, L. R. Aronson & E. Shaw (Eds.) *The Biopsychology of Development*. New York: Academic Press.

Skinner, B. F. (1974). *About Behaviorism*. New York: Knopf.

Skinner, B. F. (1977). Why I am not a cognitive psychologist. *Behaviorism*, 5, 1-10.

Skinner, B. F. (1979). *The Shaping of a Behaviorist*. New York: Knopf.

Skinner, B. F. (1983). Can the experimental analysis of behavior rescue psychology? *Behavior Analyst*, 6, 9-17.

Skinner, B. F. (1984a). Selection by consequences. *The Behavioral and Brain Sciences*, 7, 477-510.

Skinner, B. F. (1984b). Behaviorism at fifty. *The Behavioral and Brain Sciences*, 7, 669-711.

Skinner, B. F. (1984c). The phylogeny and ontogeny of behavior. *The Behavioral and Brain Sciences*, 7, 669-711.

Skinner, B. F. (1985a). Cognitive science and behaviorism. *British Journal of Psychology*, 76, 291-301.

- Skinner, B. F. (1985b). Reply to Place: "Three senses of the word 'tact'". *Behaviorism*, 13, 75-76.
- Skinner, B. F. (1989). The origins of cognitive thought. *American Psychologist*, 44, 13-18.
- Smith T. L. (1983). Skinner's environmentalism: The analogy with natural selection. *Behaviorism*, 11, 133-153.
- Sullivan, W. M. (1987). After foundationalism: The return to practical philosophy. In E. Simpson (Ed.) *Anti-Foundationalism and Practical Reasoning. Conversations Between Hermeneutics and Analysis*. Edmonton: Academic Printing and Publishing.
- Toulmin, S. (1976). *Knowing and Acting: An Invitation to Philosophy*. New York: Macmillan Publishing.
- Ullman, S. (1980). Against direct perception. *The Behavioral and Brain Sciences*, 3, 373-415.
- Walsh, B. W., & Peterson, L. E. (1985). Philosophical foundation of psychological theories: The issue of synthesis. *Psychotherapy Theory, Research and Practice*, 22, 145-153.
- Watts, F. N. (1984). Applicable psychological research in the NHS. *Bulletin of The British Psychological Society*, 37, 41-42.
- Watzlawick, P., Beavin, J. H. & Jackson, D. D. (1967). *Pragmatics of Human Communication. A Study in Interactional Patterns, Pathologies and Paradoxes*. New York: Norton & Company.
- Weiner, W. B. (1976). Manifestations of Mind: Some conceptual and empirical issues. In G. G. Globus, G. Maxwell & I. Savodnick (Eds.) *Consciousness and the Brain: A Scientific and Philosophical Inquiry*. New York: Plenum Press.
- Wilcox, S. & Katz, S. (1981). A direct realistic alternative to the traditional

- conception of memory. *Behaviorism*, 9, 227-239.
- Williams, B. A. (1986). On the role of theory in behavior analysis. *Behaviorism*, 14, 111-124.
- Williams, M. (1985). Wittgenstein's rejection of scientific psychology. *Journal for the Theory of Social Behaviour*, 15, 203-223.
- Wittgenstein, L. (1953). *Philosophical Investigations*. Oxford: Blackwell.
- Wittgenstein, L. (1965). A lecture on ethics. *The Philosophical Review*, 74, 3-12.
- Wittgenstein, L. (1969). *On Certainty*. G. E. M. Anscombe and G. H. von Wright (Eds.) Translated by D. Paul & G. E. M. Anscombe. Oxford: Blackwell.
- Wittgenstein, L. (1974a). *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul Ltd.
- Wittgenstein, L. (1974b). *Philosophical Grammar*. Oxford: Blackwell.
- Wittgenstein, L. (1975). *Philosophical Remarks*. Rush Rhees (Ed.). Oxford: Blackwell.
- Wittgenstein, L. (1980). *Remarks on the Philosophy of Psychology*. Vol. I. G. E. M. Anscombe & G. H. von Wright (Eds.). Oxford: Blackwell.
- Wittgenstein, L. (1982). *Last Writings on the Philosophy of Psychology*. Vol. I. G. H. von Wright & H. Nyman (Eds.). Oxford: Blackwell.
- Wolf, I. S. (1984). J. R. Kantor 1888-1984. *The Psychological Record*, 34, 451-453.
- Woolfolk, R. L., & Richardson, F. C. (1984). Behavior therapy and the ideology of modernity. *American Psychologist*, 39, 777-786.

Woolgar, S. (1988). *Knowledge and Reflexivity. New Frontiers in the Sociology of Knowledge*. London: Sage Publications.

Zuriff, G. E. (1979). Covert events: The logical status of first-person reports. *The Psychological Record*, 29, 125-133.

Zuriff, G. E. (1980). Radical behaviorist epistemology. *Psychological Bulletin*, 87, 337-350.

Zuriff, G. E. (1985). *Behaviorism: A Conceptual Reconstruction*. New York: Columbia University Press.